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CITY OF ABERDEEN.

REPORT

BY THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1933.

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PREFACE

In accordance with the requirements of the Department of Health for Scotland, there is herewith submitted the Annual Report on the Health and Sanitary Conditions in the City of Aberdeen for the year ended 31st December, 1933.

The population of Aberdeen for 1933, as estimated by the Registrar-General and including the inmates of Woodend Hospital and Kingseat Mental Hospital, was 172,036; the statistical rates throughout this Report are based on this figure.

During the year, the general death-rate was 13.0 per 1,000 of population, as compared with 13.4 in 1932, and 13.9 in 1931.

The marriage-rate for 1933 was 8.9, as against 8.6 in the preceding year.

The birth-rate was 17.6 in 1933, which rate is 1.1 less than that of the previous year.

The infant mortality rate throughout Scotland was 81 per 1,000 births in 1933. Among the principal towns in Scotland, Aberdeen appeared second on the list with an infant mortality rate of 79, Edinburgh being first with a rate of 66. This is the lowest rate so far recorded in Aberdeen. In the previous year, Aberdeen appeared third on the list with a mortality rate of 93.

An epidemic of scarlet fever of a mild type made its appearance in August, 1933, and continued until April, 1934. The total number of cases notified in 1933 was 1,479, as compared with an average of 493 during the preceding decennium. The case mortality in 1933 was under the average, being 0.4 as against 1.0 in the 1923-1932 decennium. Although the 1933 epidemic was mild in character as compared with previous outbreaks, it must be remembered that mild cases may be as infectious as severe cases. Further, cases which may appear at the onset of the ailment to be mild may be followed by complications of a severe nature. Scarlet Fever is a notifiable infectious disease and a duty is imposed by law on every person having charge of a case to adopt such precautions as will prevent the spread of the disease. Isolation, or separation of the sick from every person not necessary for the nursing and treatment of the patient, can be effected either at home or in hospital. In times of severe epidemic, where the home conditions are at all satisfactory, the patients may require to be treated at home, for no Local Authority can make adequate provision for the institutional treatment of all cases when a wide-spread outbreak - such as the 1933 epidemic - is prevalent. It is most important for parents to recognise the early symptoms of this disease. First of all, there is a feeling of being unwell; sore throat, headache and vomiting supervene and these symptoms are usually followed within twenty-four hours by a bright red rash. Sometimes, however, the rash is so evanescent that it may not be observed. If children suffer from headache and sore throat, with or without vomiting, the parents should not hesitate to summon the family doctor. Then again, bodily sores or discharges from the ear and nose may appear after the patient has been released from isolation. These conditions, however insignificant, are often capable of conveying the disease to others. If such sores or discharges should develop, the patient should again be isolated immediately, and the family doctor notified.

A statement regarding the Mental Health Services, as administered at Kingseat Mental Hospital, Newmachar, is incorporated in this Report.

A separate Report is issued dealing with the School Medical Services. As the school year ends on the 31st of July, it is not, therefore, coincident with the year as dealt with in the general Report.

HARRY J. RAE.

Medical Officer of Health.

August, 1934.

CITY OF ABERDEEN.

REPORT BY THE MEDICAL OFFICER OF HEALTH

For the Year 1933.

CHAPTER I.

SPECIAL INVESTIGATIONS UNDERTAKEN DURING THE YEAR.

In the Report by the Medical Officer of Health for the year 1931, reference was made to the Incidence of Undulant Fever in the north-east of Scotland, the investigation being carried out by Dr. J. Smith, Regional Bacteriologist. This research work has been continued and the investigator now gives a summary of the examinations carried out to ascertain the possible sources of infection in Undulant Fever, and the incidence of Brucella Abortus in the milk of individual cows.

I. Sources of Infection in Undulant Fever

With a view to determining the possible sources of infection in undulant fever, excluding raw milk, various milk products have been examined.

(a) Milk Products.

(1) Presence of Brucella Abortus in Butter Samples. Butter samples were obtained from various sources. Fifty-one samples were obtained in the local market; these consisted entirely of butter prepared at individual farms. Fifteen samples of English dairy butter, 5 from colonial and 8 from foreign sources were similarly examined. Guinea pig inoculation failed to show the presence of Brucella Abortus in any of the 79 samples, but 5 out of the 51 locally prepared samples contained tubercle bacilli.

(2) Margarine Samples. Milk is employed in margarine manufacture for the purpose of giving this product a butter flavour and of acting as an emulsifying agent. The treatment of the milk is essentially that of separation of cream and subsequent pasteurisation. Thereafter, the pasteurised milk is inoculated with specific micro-organisms to induce acidity and aroma. Thirty-nine samples of margarine, in which milk had been incorporated in its preparation, were examined and all, as would be expected, gave negative results.

(3) Cheese Samples. Cheese is perhaps the oldest of all milk products. At the present time, however, although there are numerous varieties of cheese, most of these are made in factories and not at farms. For the purposes of this investigation, samples of Cheshire, Cheddar (red and white), Double Gloucester, Bel Paese, Convalli, Camembert, Wenslet, Roquefort, Gouda, Stilton, Edam, Gorgonzola, Chilvern, Parmesan and locally prepared Scotch cheese were examined. Twenty-three of the samples were made in England, 6 were colonial in their origin, 28 foreign and 6 local. Examination of all 63 samples failed to show the presence of Brucella Abortus, but 2 out of the 6 locally prepared cheeses were found to contain tubercle bacilli.

(4) Ice-Cream Samples. It was intended that a fairly large series of ice-cream samples should be examined, but certain difficulties were encountered. Some of the large dairying concerns use only efficiently/

efficiently pasteurised milk for the preparation of this product. The examination of milk samples had shown that it would be useless to examine for Brucella Abortus ice-cream prepared from milk so treated. Samples were therefore obtained from Italian ice-cream vendors. Fifty samples were procured from these sources, but the results for 21 only are available, and all these failed to show Brucella Abortus. Many of the results were vitiated by the fact that the ice-cream was contaminated with various anaerobes which produced in the inoculated animals intense anaerobic infections. Attempts were made to overcome this by first treating the animals with a polyvalent antitoxin prepared by mixing monovalent antitoxins; the attempts were unsuccessful. All ice-cream samples failed to show the presence of Brucella Abortus.

(b) Evidence of Infection as a Result of Contact With Animals and Carcases.

In order to obtain evidence of possible infection in men whose daily work brings them into contact with live-stock and carcases, a number of sera were examined for agglutinins for Brucella Abortus. With the co-operation of the slaughterhouse and meat mart officials, it was possible to obtain blood from practically every man employed in the slaughtering and meat trade business.

Out of a total of 106 sera examined, 15 agglutinated Brucella Abortus to a dilution of 1/25 or more; 11 positive reactions occurred in sera from actual slaughtermen, and 4 in sera from men employed in the meat trade. From the slaughtermen, 5 sera agglutinated Brucella Abortus to a dilution of 1/25, 5 to 1/50 and 1 to 1/100; from the men working with carcases, hides and offal, 3 agglutinated Brucella Abortus to a dilution of 1/25 and 1 to 1/50. It was found that 55 men were employed in killing cattle, sheep and pigs, 10 in killing cattle and sheep, and 3 in killing cattle only; all the 11 with agglutinins of 1/25 or more in their sera killed all three types of animals.

When the relationship of the length of time employed to the agglutinins was investigated, it was found that in slaughtermen the positive reactions occurred in men who had been thus employed for 11 years or more, whereas in the men handling hides, carcases and offal, 3 out of 4 positive reactions occurred in men who had been employed for less than 10 years. Furthermore, when the relationship of agglutinins in age groups in the abattoir workers was compared with the agglutinins in the sera of normal individuals in the same age groups, this showed a greater incidence in the slaughtermen and other workers than amongst the normal males. Thus, 16.1% of sera from slaughtermen and 10.5% of sera from men working in allied trades agglutinated Brucella Abortus to a dilution of 1/25 or more, as compared with only 6.8% of sera from normal men.

When the men who showed agglutinins in the blood were questioned as to a history of previous illness, no evidence was obtained that any of them had suffered from an illness suggesting undulant fever. It is presumed, therefore, that latent infections must have occurred in some to give rise to the higher incidence of agglutinins.

(c) Evidence of Brucella Abortus Infections in Sheep and Swine.

Bovine infections due to Brucella Abortus are extremely prevalent, but little evidence has been produced so far by the veterinary profession in/

in this country to show whether or not sheep and swine are also naturally infected. So far as can be ascertained from veterinary research workers, there is little evidence of enzootic abortion in either sheep or swine.

Samples of blood were obtained from animals killed in the slaughterhouse. From sheep, 170 samples were obtained from hoggs, 2 from withers, 15 from ewes, 7 from tups and 5 from lambs. All sera gave completely negative agglutination tests against Brucella Abortus, the lowest dilution of the sera to be tested being 1/25. Similarly, from swine, 194 samples of blood were obtained from half-grown fat pigs (male and female), 21 from sows and 4 from boars. Only 2 samples from the half-grown animals agglutinated Brucella Abortus to a dilution of 1/25. Thus, only 0.9% of sera showed agglutinins, and then only to a titre of 1/25, which can scarcely be regarded as significant.

Again, in order to attempt to isolate the porcine type of Brucella Abortus, specimens of uterus, bladder and spleen were obtained from 40 sows as slaughtered. In some instances, the animals were slaughtered on account of illness at the termination of their pregnancy. Guinea pig inoculation of emulsions of the tissues failed entirely to show the presence of Brucella Abortus, but showed that 5,or 12.5%, of the animals were infected with B. tuberculosis. Presumably, therefore, had the porcine type of Brucella Abortus been present in the tissues, their presence would have been detected as reliably as that of B. tuberculosis.

II. The Excretion of Brucella Abortus in Milk.

An investigation has been made into the incidence of Brucella Abortus in the milk of individual cows. The results can be considered on the basis of two groupings, namely, (1) the findings obtained from a herd of dairy cows which had been vaccinated with living Brucella Abortus vaccine; and (2) the results obtained from the examination of random milk samples from individual cows which had been sent to the laboratory for examination for tubercle bacilli.

(1) Findings in Herd of 84 Vaccinated Cows.

From these, it is seen that of the milk samples from 19 cows which showed whey agglutinins in a dilution of 1/25 or more, only 10, or 11.9%, were proved to contain Brucella Abortus, and the whey from all these agglutinated Brucella Abortus to a dilution of 1/200 or more.

Since all the animals had received living abortus vaccine 1-2 years previous to the present tests, serum and whey agglutinins were not an index of natural infection. Of 31 of the cows with serum agglutinin titres of 1/400 or more, 10, or 32%, excreted Brucella Abortus in their milk, and 9 out of 15, or 60%, of those with serum titres of 1/800 or more, excreted the organism. It is interesting to note that, despite vaccination and contact with infection, 4 out of the 84 animals failed to show agglutinins in the blood in a dilution of 1/25, while 95.2% gave positive agglutination tests in dilutions ranging from 1/25 to 1/12,800.

From 15 of the cows showing positive whey agglutination tests with milk from all quarters, samples from individual quarters were obtained, and whey agglutination tests carried out. The results show that there is some difference in the agglutinin titre of the milk/

milk from the various quarters. In all whey agglutination tests, it has been found that the titre of agglutinins in the whey is often considerably less than the titre of the blood serum. Presumably, whey agglutinins are due to the presence of serum agglutinins in the milk, and the lower titre is due to dilution. In those cases in which the whey agglutinins are present, the secretory apparatus has been damaged by infection - past or present - and this injury allows the serum agglutinins to percolate into the milk. There is no indication whatsoever that the whey agglutinins are formed locally.

Another interesting point arose in connection with the strains of Brucella Abortus which were isolated. Thus, 2 out of 10 strains grew in the normal atmosphere without the addition of 10% carbon dioxide. These strains were probably established in the udder as a result of vaccination with a living Brucella Abortus organism which culturally behaved in the same fashion.

(2) Brucella Abortus in Random Milk Samples from Individual Cows.

In order to get some index of the prevalence of Brucella Abortus in the milk samples of individual cows, samples as sent to the laboratory for examination for tubercle bacilli were examined. Thus, out of a total of 203 samples examined, Brucella Abortus was recovered by guinea pig inoculation from 23, or 11.3%, a figure comparable with that obtained from the herd of vaccinated cows. Here again, whey agglutinins in a dilution of 1/200 or more indicated that Brucella Abortus would probably be found by animal inoculation. In 3 instances, however, no whey agglutinins were demonstrated, and yet guinea pig inoculation showed Brucella Abortus; while in 2 instances, where the whey agglutinin titres ranged from 1/25 to 1/100, the animal result was positive; and in 1 instance, when the whey titre was 1/400, animal inoculation failed to show the presence of Brucella Abortus. Again, cultural examination showed that 3 out of the 23 strains grew in a normal atmosphere, whereas the others required the addition of 10% carbon dioxide before growth occurred. All strains were agglutinated to the full titre of a Brucella Abortus agglutinating serum and all absorbed the agglutinins.

CHAPTER II.

INFECTIOUS DISEASES.

Table I. on page 10, gives the death-rate from each of the principal infectious diseases since the commencement of registration. In Table II. on page 11, the number of cases and deaths from each disease is stated for the successive months of the year. Table III. on page 12, gives the morbidity and mortality from infectious disease distributed according to ages and where treated, and in Table IV. the cases and deaths are supplied for each of the years 1923 to 1933.

DISEASES WITH A SPECIFIC PROPHYLAXIS.

Small-pox.

No cases of small-pox occurred during 1933.

Vaccinia.

The passing of the Vaccination (Scotland) Act, 1907, permitted exemption from vaccination of those children whose parents declared formally that they had conscientious objection to vaccination. Table V. on page 14, shows the percentage of the total surviving children at the end of the calendar year following the year of birth who have remained unvaccinated in each year from 1907 to 1932. In 1932, the proportion of children thus escaping vaccination was 12.7 per cent., as against 10.3 in 1931. This rate of 12.7 is the highest since 1917 when the rate was 13.1.

This country has so long enjoyed the advantages of infant vaccination and the consequent protection, especially against small-pox in early life, that people are nowadays accustomed to view small-pox as a disease to which only adults are liable. But all experience shows that where infant vaccination is unknown, or is neglected, children take small-pox almost as readily as they take measles, but suffer much more severely than they do from that disease. In a vaccinated community, adults are more liable to be attacked by small-pox, merely because of the protection afforded by vaccination in infancy becoming gradually reduced, unless such vaccination has been reinforced by a second vaccination when the age of adolescence is reached.

It cannot be too strongly impressed on the community that small-pox is possessed of three characteristics, all of which are not combined in any other zymotic disease, namely:- (1) high infectiousness; (2) great severity, with frequent liability to a fatal termination; and (3) permanent disfigurement. Anyone who has seen small-pox in unvaccinated persons, with its highly dangerous and loathsome effects, could not but be convinced that the inconvenience of vaccination is as nothing when compared with the grave risks of small-pox.

The disabling effects of an attack of small-pox in a child who has remained unvaccinated because of the objections of the parents ought not to be viewed lightly. In every case of small-pox contracted under such circumstances, the individual eventually becomes aware of the life-long handicap of an indelibly scarred face, of blindness, or of deafness, and he naturally experiences a deep feeling of regret, if not of resentment, that his parents had failed to secure for him in infancy the protection enjoined by law against an attack of small-pox.

Scarlet Fever.

In 1933, 1,479 cases were notified, as compared with 318 cases in 1932, and an average of 493 in the 1923-32 decennium. The case-mortality in 1933 was 0.4 per cent. as against 0.3 in 1932 and 1.0 in the preceding decennium.

The number of cases removed to hospital was 1,023, or 69 per cent. of the cases. There were 5 deaths in hospital, giving a case-mortality of 0.5 per cent.

This disease appeared in epidemic form in the end of August, 1933. For the last four months of the year, 1,082 cases with 5 deaths were recorded, as against 397 cases and 1 death in the preceding eight months. This epidemic, which continued until April, was of a mild character as compared with previous epidemics.

From 1908 to 1916 scarlet fever was continuously epidemic in Aberdeen, interrupted only by a small recession in 1910. In 1915, there were 1,873 cases and 142 deaths recorded, giving a case-mortality of 7.6 per 100. These figures are the highest recorded for cases and deaths in any one year since the commencement of notification in 1881.

Diphtheria.

The number of cases of this disease notified in 1933 was 301, as compared with 205 cases in 1932. The case-mortality for 1933 was 3.7 per cent., as against 2.9 per cent. in 1932. The annual average number of cases during the 1923-32 decennium was 344, with a case-mortality of 4.0 per cent. The percentage of cases receiving hospital treatment was 98.0.

Of contacts bacteriologically examined, 0.7 per cent. of the swabbings gave a positive finding. During the preceding decennium, the percentage of positive swabbings averaged 0.6

SUSCEPTIBILITY TESTS AND ACTIVE IMMUNISATION AGAINST DIPHTHERIA AND SCARLET FEVER.

The following table relates to the immunisation services provided in 1933 for members of the staff of the City Hospital, for in-patients, for out-patients, and for children attending Child Welfare Centres.

	Staff.		In-Patients.		Child Welfare Centres.		Out-Patients.	
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Schick Tests ...	30	9	-	-	-	-	7	2
Dick Tests ...	12	25	-	-	-	-	5	4
Diphtheria Prophylactic Injections	37		-		-		14	
Scarlatina do.	12		130		-		10	
Combined Diphtheria and Scarlatina Prophylactic Injections	14		-		46		1133	

Typhoid and Paratyphoid Fevers.

Two cases of typhoid and 7 of paratyphoid B. fever were reported in 1933. There were no deaths. The two cases of typhoid fever occurred in one household, the original case being a visitor from the south. All the cases were treated in the City Hospital. In the preceding decennium, there was an annual average of 12 cases and 1 death.

Venereal Diseases.

A detailed analysis of venereal diseases cases which have come to the knowledge of the Health Department is given in the section of this Report dealing with the Venereal Diseases Services. During the year, there were 139 fresh City cases of syphilis, 348 of gonorrhoea, 10 of soft chancre and 125 of non-specific venereal infections.

DISEASES SPREAD BY DISCHARGES FROM THE MOUTH AND NOSE.

Measles.

The number of cases of measles reported to the Health Department in 1933 was 619 with 10 deaths, giving a case-mortality of 1.6 per cent. Of the 10 deaths, 4 occurred in children under 1 year, 4 in the age-period 1-5 years, and 2 in the 5-15 age-period. The average yearly number of cases during the 1923-32 decennium was 1,068, and the average case-mortality 2.3. Of 37 cases receiving hospital treatment, 1 proved fatal.

German Measles.

There were 27 cases of this disease reported in 1933, as against an annual average of 101 in the preceding decennium. There were no deaths.

Whooping Cough.

Of this disease, 330 cases were reported with 17 deaths, giving a case-mortality of 5.2 per cent. Of the 17 deaths, 7 occurred in children under 1 year of age, and 10 in children 1-5 years. The average annual number of cases during the 1923-32 decennium was 642, with a case-mortality of 4.4. Of 27 cases receiving institutional treatment, 8 died.

Influenza.

Influenza, as distinct from influenzal pneumonia, is not a compulsorily notifiable disease. Influenza, excluding influenzal pneumonia, was registered as the cause of 39 deaths in 1933, as against 9 in 1932.

This increase in the number of deaths for 1933 is accounted for by an epidemic of influenza which commenced in December, 1932 and continued during the month of January, 1933. As compared with the preceding epidemic in 1929, this wave was characterised by much shorter duration and by lower mortality.

Acute Primary and Influenzal Pneumonia.

There were 633 cases of primary pneumonia notified in 1933, with 126 deaths. During the preceding ten years, the average annual number of cases was 549, and the average annual number of deaths 118. Of influenzal pneumonia, there were 43 cases with 20 deaths in 1933, as against an annual average of 48 cases and 14 deaths in the preceding decennium.

Meningococcic Meningitis.

Five cases of this disease were notified; all occurred in children under school age, and were all removed to hospital. Three of the cases proved fatal. There was no discoverable relationship between the cases. During the preceding ten years, the average annual number of cases was 4.4, and the average annual number of deaths 2.8.

Acute Poliomyelitis (Infantile Paralysis).

This disease showed an increase as compared with the preceding ten years, there being 10 cases notified in 1933 as against an annual average of 3 in the preceding decennium. Six of the cases occurred in children 1-5 years and 3 in the 5-15 age-period. There was one death in a child of 8 years.

Epidemic Encephalitis.

One case of this disease, not previously notified, proved fatal. The case - a female adult - had been receiving institutional treatment for a few years.

Tuberculosis.

A detailed analysis of the cases and deaths from tuberculosis in Aberdeen is given in the section of this Report relating to Tuberculosis Services.

Chicken-pox.

This disease, by order of the Department of Health for Scotland, ceased to be compulsorily notifiable in December, 1932. During 1933, 176 cases of chicken-pox were brought to the knowledge of the Department.

DISEASES SPREAD BY THE EXCRETA.

Typhoid and Paratyphoid Fevers.

These diseases have already been referred to under the group of diseases for which there is a specific prevention.

Dysentery.

During 1933, there were 143 cases of dysentery notified, of which 44 received hospital treatment. There were 2 deaths in children aged 4 months and 2 years respectively.

DISEASES SPREAD BY CUTANEOUS INOCULATION.

Erysipelas.

During 1933, there were 113 cases of this disease reported, with 6 deaths. In the 1923-32 decennium, the average annual number of cases was 114 and the deaths 7.

Scabies.

A record of the number of cases of other inflammatory affections of the skin, including Scabies, receiving treatment at the Skin Department of the City Hospital, is given in the section of this Report dealing with Municipal Hospital services.

DISEASES ASSOCIATED WITH CHILD-BIRTH.

Puerperal Pyrexia and Puerperal Fever.

During 1933, 96 cases of puerperal pyrexia were brought to the notice of the Department. In order to get cases of puerperal fever into hospital as early as possible, a provisional diagnosis of puerperal pyrexia is accepted from the practitioner. Should such a case turn out on investigation to be puerperal fever the diagnosis is altered accordingly.

Of these 96 cases, 21 were finally recorded as puerperal pyrexia, the cause of the rise in temperature being attributed to mastitis, pyelitis, influenza, etc. Eight cases occurred in the practice of public institutions, 4 in private Maternity Homes, and 9 in the practice of private practitioners. Of the 21 cases, 10 were treated in the Municipal Hospitals, 4 in Maternity Homes, and 7 in their own homes. There were 4 deaths, 2 occurring in the Municipal Hospitals, 1 in a Maternity Home and 1 among cases treated at home.

Among the 75 cases of puerperal fever there were 7 deaths. Eight cases occurred in the practice of midwives with 1 death, 37 in the practice of private practitioners with 2 deaths, and 30 in public institutions with 4 deaths (including the death of a woman ordinarily resident in Glasgow). Of the 75 cases, 70 were treated in the Infectious Diseases Hospital, 4 were left in the institution where the confinement or abortion had taken place, and the remaining case was treated at home.

Additional information regarding puerperal pyrexia is given in the section of the Report dealing with Maternity and Child Welfare Services.

Ophthalmia Neonatorum.

During 1933 there were 53 cases of ophthalmia neonatorum, which is equivalent to 17 cases per 1,000 registered births. Additional information regarding this disease is given in the section of the Report dealing with Maternity and Child Welfare Services.

INSECT AND VERMIN-BORNE DISEASES

Typhus Fever, Infective Jaundice, Plague.

There were no cases of these diseases during the year 1933.

Malaria.

Two cases of malaria were notified during the year. In both cases the infection was contracted abroad. There were no deaths.

TABLE I. - ABERDEEN - DEATHS AT ALL AGES FROM SELECTED CAUSES.

(per 100,000 of population) - Years 1856-1933.+

Year.	Smallpox	Scarlet Fever	Diphtheria and Croup	Measles	Whooping Cough	Influenza	Typhus Fever	Typhoid and Para-typhoid Fever	Tuberc. Dis.		Dis. of Digest. System (inc. Diarrhoea)	Cancer and other Malignant Diseases	Bronchitis	Pneumonia	Dis. of the Circl. Sys. *
									Respiratory	Other Tuberculosis					
1933	0	3	6	6	10	35	0	0	54	12	80	155	56	98	267
1932	01	1	4	14	21	10	0	0	46	26	77	160	62	88	267
1931	0	4	4	5	14	18	0	1	69	21	57	151	83	116	280
1930	1	1	7	14	9	6	0	0	51	20	76	144	47	94	256
1929	0	1	12	0	8	42	0	0	55	26	75	162	75	142	279
1928	0	3	9	30	22	12	0	1	68	34	77	149	57	89	242
Average 1928-1932	0.2	2	7	13	15	18	0	0.4	58	25	72	153	65	106	265
1927	0	2	9	1	9	25	0	0	64	33	71	140	71	98	220
1926	0	4	12	12	9	21	0	0	72	38	90	128	54	77	202
1925	0	9	13	17	32	11	0	0	94	26	81	144	57	73	187
1924	0	2	7	34	44	33	0	1	88	43	61	142	82	87	209
1923	0	2	5	25	3	7	0	2	79	42	85	131	67	75	194
Average 1923-1927	0	4	9	18	19	19	0	1	79	36	78	137	66	82	202
" 1921-1925	0	5	11	33	29	27	0	1	88	31	80	140	80	92	195
" 1916-1920	0	6	16	22	23	73	0	3	106	43	87	121	99	122	178
" 1911-1915	0.2	38	42	56	32	16	0	4	111	49	124	116	101	128	184
" 1906-1910	0	6	15	26	42	20	0	2	116	61	115	103	105	116	180
" 1901-1905	0.1	8	9	41	47	20	3	4	138	69	162	87	145	125	179
" 1896-1900	0	23	18	35	53	29	0.2	9	167	70	210	87	172	109	167
" 1891-1895	0.4	21	22	63	52	56	1	10	181	72	190	81	210	100	156
" 1886-1890	1	14	10	80	66	9	1	15	184	67	202	68	216	100	175
" 1881-1885	0.2	13	15	36	67	1	6	13	204	74	185	69	251	82	159
" 1876-1880	1	35	30	28	66	2	19	29	223	101	194	61	286	72	146
" 1871-1875	48	68	30	53	68	5	20	35	243	107	214	56	281	60	136
" 1866-1870	4	71	5	50	62	8	62	49	298	130	259	59	238	70	122
" 1861-1865	36	93	49	51	62	12	176		274	128	280	57	220	59	122
" 1856-1860	40	118	54	70	69	12	109		322	179	203	56	182	58	111

+Corrected for transferred deaths in 1904 and subsequent years.

*From 1911 onwards; Cerebral Embolism & Thrombosis excluded.

TABLE II. - PROGRESS OF INFECTIOUS DISEASES DURING PRECEDING TWELVE MONTHS.

Disease.		1933.												Whole Year.
		Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
A. Compulsorily Notifiable.														
Smallpox	Cases	..	..	..	..	..	..	..	..	..	..	..	..	...
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	...
Scarlet Fever.. ...	Cases	46	28	26	40	62	63	54	78	199	302	271	310	1479
	Deaths	..	..	..	..	1	..	..	..	..	2	3	..	6
Diphtheria	Cases	22	23	22	19	26	15	9	14	40	34	27	50	301
	Deaths	2	..	1	..	3	..	1	..	1	1	..	2	11
Typhus Fever... ...	Cases	..	..	..	..	..	..	..	..	..	..	..	..	...
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	...
Enterica Infections	Cases	..	..	1	1	1	2	3	1	..	..	..	..	9
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	...
Dysentery	Cases	5	13	11	15	7	6	15	31	11	7	7	15	143
	Deaths	..	..	..	..	1	..	..	..	1	..	..	..	2
Acute Poliomyelitis	Cases	..	..	..	..	..	..	3	5	1	1	..	..	10
	Deaths	..	..	..	..	..	..	1	..	..	..	..	..	1
Epidemic Cerebro-spinal Meningitis	Cases	..	1	2	..	1	1	..	..	..	..	..	..	5
	Deaths	..	..	2	..	..	1	..	..	..	..	..	..	3
Epidemic Encephalitis	Cases	..	..	..	1	..	..	..	..	..	..	..	..	1
	Deaths	..	..	..	1	..	..	..	..	..	..	..	..	1
Acute Pneumonia (Primary	Cases	135	78	65	55	43	37	24	25	22	28	45	76	633
	Deaths	35	14	13	16	10	3	4	6	8	2	7	8	126
Acute Pneumonia (Influenzal	Cases	36	4	..	..	2	..	1	..	..	..	..	..	43
	Deaths	16	3	..	..	..	..	1	..	..	..	..	..	20
Tubercle (Pulmonary	Cases	8	8	20	13	11	11	12	8	15	7	8	7	128
	Deaths	11	8	12	12	9	7	7	7	5	6	4	5	93
Tubercle (Other	Cases	2	3	9	5	4	7	5	3	2	6	5	4	55
	Deaths	3	1	3	..	2	2	1	2	1	2	2	1	20
Erysipelas	Cases	10	8	9	13	4	7	7	11	3	11	11	19	113
	Deaths	..	1	1	..	..	1	..	..	..	..	..	3	6
Puerperal Fever ...	Cases	5	6	4	8	3	8	4	13	4	8	7	5	75
	Deaths	1	..	1	..	1	..	1	..	1	..	1	1	7
x Puerperal Pyrexia ...	Cases	2	3	1	1	3	2	..	5	..	2	1	1	21
Ophth.Neonatorum ...	Cases	4	4	7	2	4	7	4	4	2	4	3	8	53
Malaria	Cases	..	..	..	..	..	..	1	..	..	1	..	..	2
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Infective Jaundice.. ...		..	..	..	..	..	..	..	..	..	..	..	..	..
Plague		..	..	..	..	..	..	..	..	..	..	..	..	..
B. Not Compulsorily Notifiable.														
+ Measles	Cases	56	113	185	95	71	28	11	5	34	11	7	3	619
	Deaths	4	..	3	1	1	..	1	..	..	..	..	..	10
German Measles ...	Cases	..	3	4	5	1	3	1	..	2	6	1	1	27
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
+ Whooping Cough ...	Cases	39	51	56	35	23	3	5	9	3	23	33	50	330
	Deaths	3	4	2	2	2	1	1	..	..	..	1	1	17
= Chickenpox	Cases	26	26	10	4	13	27	12	11	12	8	14	13	176
	Deaths	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ...	Cases	396	372	432	312	279	227	171	223	350	459	440	562	4223
	Deaths	75	31	38	32	30	15	18	15	17	13	18	21	323
Influenza, excluding Influenzal Pneumonia	Deaths	37	1	..	..	1	..	..	..	..	..	..	..	39

x Compulsorily notifiable from 1st October, 1929.

+ Compulsorily notifiable from 1881 to 1903; now reported mainly by School Attendance Officers.

= Compulsorily notifiable from 25th March, 1927, to December, 1932.

TABLE III. - MORBIDITY AND MORTALITY OF INFECTIOUS DISEASES DURING 1933.

Disease.		No. of Cases and Deaths at various Age-Periods.								Cases removed for instit. treatment.			Cases not removed to Hosp.
		At all Ages	Years.							Municipal Hosps		Other Insts.	
			Under 1	1-5	5-15	15-25	25-45	45-65	65+	City Hosp.	Woodend Hosp.		
A. Compulsorily Notifiable.													
Smallpox ...	Cases Deaths	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever.	Cases	1479	14	422	910	75	53	5	...	1005	...	18	456
	Deaths	6	...	3	3	...	...	...	...	4	...	1	1
Diphtheria ...	Cases	301	2	78	172	33	14	1	1	295	...	2	4
	Deaths	11	...	4	6	...	...	...	1	11	...	...	...
Enterica Infectns.	Cases	9	...	1	2	4	1	...	1	9	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	Cases	143	10	54	43	9	22	4	1	44	...	...	99
	Deaths	2	1	1	...	...	...	...	...	1	...	...	1
Acute Poliomyelitis	Cases	10	...	6	3	1	...	...	...	7	...	1	2
	Deaths	1	...	...	1	...	...	...	...	...	...	1	...
Epidemic Cerebro-Spinal Meningitis	Cases	5	2	3	...	...	...	...	...	5	...	...	...
	Deaths	3	2	1	...	...	...	...	...	3	...	...	...
Epidemic Encephalitis ...	Cases	1	...	...	...	1	...	...	...	...	...	1	...
	Deaths	1	...	...	...	1	...	...	...	...	...	1	...
Acute Pneumonia -													
(a) Primary	Cases	633	96	182	96	67	86	68	38	193	170	56	214
	Deaths	126	33	27	2	4	13	27	20	28	38	13	47
(b) Influenzal	Cases	43	2	1	...	4	12	13	11	1	1	8	33
	Deaths	20	...	1	...	1	5	6	7	...	1	4	15
Tuberculosis Diseases -													
(a) Pulmonary	Cases	128	...	6	3	28	56	28	7	24	61	11	32
	Deaths	93	...	4	2	14	40	25	8	17	17	9	50
(b) Other ...	Cases	55	2	13	12	12	13	1	2	3	31	13	8
	Deaths	20	2	4	2	5	5	1	1	3	7	5	5
Erysipelas ...	Cases	113	6	6	5	7	24	41	24	55	1	...	57
	Deaths	6	4	1	...	...	...	...	1	6	...	...	...
Puerperal Fever	Cases	75	...	...	...	24	51	...	...	70	1	3	1
	Deaths	7	...	...	...	4	3	...	...	6	...	1	...
Puerperal Pyrexia	Cases	21	...	...	...	8	13	...	...	9	1	4	7
Ophthal. Neon.	Cases	53	53	...	...	...	...	...	...	10	1	1	41
Malaria ...	Cases	2	...	...	...	...	2	...	...	...	...	...	2
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...
B. Not Compulsorily Notifiable													
Measles ...	Cases	619	34	178	400	6	1	...	...	37	...	...	582
	Deaths	10	4	4	2	...	...	...	...	1	...	...	9
German Measles	Cases	27	...	6	21	...	...	...	...	...	...	...	27
	Deaths	...	...	...	...	...	...	...	...	...	...	...	
Whooping Cough	Cases	330	35	119	176	...	...	...	...	27	...	...	303
	Deaths	17	7	10	...	...	...	...	...	8	...	...	9
Chickenpox ...	Cases	176	13	44	113	4	2	...	...	6	...	1	169
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...
Total...	Cases	4223	269	1119	1956	283	350	161	85	1800	266	120	2037
	Deaths	323	53	60	18	29	66	59	38	88	63	35	137

TABLE IV. - MORBIDITY AND MORTALITY OF INFECTIOUS DISEASES DURING EACH YEAR FROM 1923 to 1933.

Disease.		1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	Annual Average 1923-1932.
A. Compulsorily Notifiable.													
Smallpox ...	Cases	0	0	0	10	1	0	0	0	1	1	1	1.4
	Deaths	0	0	0	1	0	0	0	0	0	0	0	0.1
Scarlet Fever...	Cases	1479	318	386	344	424	728	702	843	712	197	271	492.5
	Deaths	6	1	6	2	2	5	3	8	15	3	4	4.9
Diphtheria ...	Cases	301	205	326	505	410	458	303	323	432	286	189	343.7
	Deaths	11	6	7	12	20	15	15	20	22	11	8	13.6
Typhus Fever ...	Cases	0	0	0	0	0	0	0	0	0	0	0	0.0
	Deaths	0	0	0	0	0	0	0	0	0	0	0	0.0
Enterica Infections	Cases	9	5	3	8	7	16	7	3	40	9	21	11.9
	Deaths	0	0	1	0	0	1	0	0	0	1	3	0.6
Dysentery ...	Cases	143	95	94	91	66	97	48	44	15	2	0	55.2
	Deaths	2	2	2	3	3	1	4	1	0	0	0	1.6
Acute Poliomyelitis	Cases	10	1	1	1	2	2	3	5	5	6	0	2.6
	Deaths	1	0	0	1	1	0	0	0	0	0	0	0.2
Epidemic Cerebro-Spinal Meningitis	Cases	5	11	8	2	4	4	2	3	1	4	5	4.4
	Deaths	3	4	5	3	3	3	2	2	0	3	3	2.8
Epidemic Encephalitis ...	Cases	1	2	0	1	3	4	1	0	9	7	0	2.7
	Deaths	1	2	0	1	1	0	0	0	0	3	0	0.7
Acute Pneumonia: Primary	Cases	633	607	706	655	869	485	579	377	497	383	335	549.3
	Deaths	126	87	150	100	184	112	124	97	102	121	107	118.4
Acute Pneumonia: Influenzal	Cases	43	20	18	12	74	34	136	57	39	77	17	48.4
	Deaths	20	8	9	2	35	11	21	13	6	29	6	14.0
Tubercle: Pulmonary	Cases	128	140	146	123	126	150	184	219	227	285	264	186.9
	Deaths	93	79	116	85	91	113	105	119	154	143	128	113.3
Tubercle: Other	Cases	55	87	94	71	82	129	135	137	144	134	134	114.7
	Deaths	20	45	36	34	43	55	55	63	43	70	68	51.2
Erysipelas ...	Cases	113	94	107	144	132	119	95	120	124	92	110	113.7
	Deaths	6	6	8	11	10	6	2	5	9	4	4	6.5
Puerperal Fever	Cases	75	71	74	72	49	48	38	36	18	15	15	43.6
	Deaths	7	14	6	5	7	10	9	8	10	8	8	8.5
Puerperal Pyrexia	Cases	21	24	18	20	21	25	...	...	...	...	...	...
Ophth. Neonatorum	Cases	53	60	69	67	70	51	54	48	59	69	63	61.0
Malaria ...	Cases	2	3	6	5	4	7	4	6	4	3	3	4.5
	Deaths	0	0	0	0	0	0	0	0	1	0	0	0.1
Infective Jaundice ...		0	0	0	0	0	0	0	0	0	0	...	...
Plague ...	...	0	0	0	0	0	0	0	0	...	...	...	...
B. Not compulsorily Notifiable.													
Measles ...	Cases	619	1562	2032	2461	48	1812	199	991	1322	1488	594	1068.0
	Deaths	10	24	9	23	0	50	1	20	27	56	41	25.1
German Measles..	Cases	27	365	34	9	15	65	22	25	362	111	2	101.0
	Deaths	0	0	0	0	0	0	0	0	0	0	0	0.0
Whooping Cough..	Cases	330	752	797	375	428	579	395	362	933	1712	87	642.0
	Deaths	17	36	24	15	13	37	15	15	53	71	5	28.4
Chickenpox ...	Cases	176	1340	718	866	466	397	336	265	266	318	255	522.7
	Deaths	0	0	0	0	1	0	0	0	0	0	1	0.2
Influenza, excluding Influenzal Pneumonia	Deaths	39	9	27	8	35	10	21	20	12	25	5	17.2

TABLE V. - STATEMENT OF NUMBER OF DECLARATIONS OF CONSCIENTIOUS OBJECTION TO VACCINATION.

Year.	Registered Births.	Deaths before Vaccination.	Survivors.	Con-scientious Objectors.	Percentage.	Year.	Registered Births.	Deaths before Vaccination.	Survivors.	Con-scientious Objectors.	Percentage.	Year.	Registered Births.	Deaths before Vaccination.	Survivors.	Con-scientious Objectors.	Percentage.
1907	4504	470	4034	84	2.1	1916	3627	401	3226	345	10.7	1925	3535	324	3211	262	8.2
1908	4450	511	3939	219	5.6	1917	2966	326	2640	347	13.1	1926	3557	291	3266	262	8.0
1909	4492	526	3966	339	8.5	1918	2817	351	2466	260	10.5	1927	3324	277	3047	243	8.0
1910	4300	448	3852	362	9.4	1919	3481	357	3124	357	11.4	1928	3448	258	3190	299	9.4
1911	4028	478	3550	406	11.4	1920	5010	500	4510	290	6.4	1929	3194	230	2964	269	9.1
1912	4152	511	3641	478	13.1	1921	4326	457	3869	354	9.4	1930	3431	245	3186	301	9.4
1913	3872	467	3405	491	14.4	1922	4038	398	3640	348	9.6	1931	3367	233	3134	323	10.3
1914	4041	481	3560	413	11.6	1923	3847	317	3530	305	8.6	1932	3111	246	2865	364	12.7
1915	3837	483	3354	412	12.3	1924	3527	352	3175	246	7.7						

CHAPTER III.

ENVIRONMENTAL HYGIENE.

TOWN PLANNING.

The Aberdeen and District Town Planning Scheme, 1933 - promoted by the Town Council of Aberdeen and by the County Councils of Aberdeen and Kincardine - under the Town Planning (Scotland) Act, 1925, became effective as from 17th March, 1933, on which date it received the official sanction of the Department of Health for Scotland.

The formal hearing of objections took place in the beginning of December, 1932, when a Public Inquiry was conducted by Mr. G.D. MacNiven of the Department of Health for Scotland. Prior to this hearing, a considerable number of questions was adjusted between the Committee and the respective objectors, whilst certain other disputed but relatively unimportant sections of the Scheme were dropped as it was desirable to have the Scheme passed on an early date in view of the fact that a new Act was to come into force on 1st April.

The Scheme is now administered by each of the three responsible Authorities within their respective areas.

Extensive powers have been obtained in connection with amenity and roads, but from the public health viewpoint, the two outstanding features are zoning and open spaces. In this connection, the provisions of the Scheme afford abundant scope for steady and progressive work.

It must be borne in mind that heavy industries and noxious trades will gradually be removed from the centre of the City and be placed in the zoned area allotted to them, where they will be least objectionable to the inhabitants. Then, in the course of years, the cattle industry will be similarly merged into a convenient centre where congestion of street traffic will be avoided.

HOUSING CONDITIONS.

Towards the end of the summer, it was ascertained that 41 householders were living in tents and vans, and, in most cases, the conditions were such that the children might have suffered in health. A large number of these children were removed to Summerfield Hospital, a disused Infectious Diseases Hospital belonging to the Aberdeen County Council, until such time as the Town Council could erect temporary dwellings within the Jute Works which they had recently acquired. Great credit is due to Miss Frater, Matron, City Hospital, for the admirable manner in which these children were tended and fed during their stay in Summerfield Hospital.
The Town Council erected 46 dwellings within the Jute Works; 29 of these houses were used to re-house tent and van dwellers who were unable themselves to obtain other accommodation and the remaining 17 dwellings were allocated to badly overcrowded families.

1. Number of Houses Built by Private Enterprise.

Since 1919, 1497 houses have been built by private enterprise with the aid of subsidies under the Housing Acts.

In 1933, 146 houses were completed without the aid of subsidy, whilst 342 were completed with the aid of subsidy. Thus a total of 488 houses/

houses were erected by private enterprise, as compared with 221 in 1932 and 161 in 1931.

This method of helping to meet the housing needs of the City should be warmly encouraged. The number of houses built by private enterprise is gradually increasing, and during the current year it is likely that a large number of such houses will be erected. Their purchase by individual householders will render vacant many houses, and thus, by a gradual process of decanting, the number of overcrowded and of sub-let houses will be diminished.

2. Number of Houses erected by the Local Authority.

Ninety new houses, under the Housing Schemes, were completed during the year, and, at 31st December last, there were in course of erection 168 houses at Mansefield Road Torry, and 138 at School Road.

Including 280 houses erected in connection with the Improvement Scheme, the total number of houses completed in the City since 1919 under the Corporation Housing Schemes was 3100.

The Council, at a meeting held on 17th April, 1933, decided to purchase the area of ground lying on the east side of King Street, between Seaton Place and School Road, and extending to some 27 acres. At a subsequent meeting on 5th June, it was decided that 20 acres of this ground should be acquired from the Common Good for the purpose of erecting 498 dwellings under the Housing (Scotland) Act, 1930, and that a first instalment of 258 dwellings should be erected as soon as practicable, and as mentioned above, 138 of these were in course of erection at 31st December, 1933.

3. Type and Rental of New Houses.

The room capacity of the 3100 additional houses is as follows:-

154	houses	contain	4 rooms.
1906	"	"	3 rooms.
1040	"	"	2 rooms.

The respective rentals of these houses, exclusive of rates, are as follows:- 4 rooms - £32.10/-; 3 rooms - ranging from £22 to £28, with a cheaper type at £15 and £16; and 2 rooms - mostly £12 to £14 (48 houses at £19 and £20).

4. Sub-let Houses.

A census of sub-let houses was made in 1925, when it was found that 2,232 families were living in sub-let apartments. Few of these families have found accommodation in the new houses, and, from data available to the Public Health Department, the present number of sub-let houses is not under that number.

5. Overcrowded Houses.

During 1933, 490 houses were found, by the Sanitary Staff, to be overcrowded. The total number of overcrowded families, known to the Sanitary Department, is 1340, the excess above the recognised hygienic standard ranging approximately from one half adult to five and a half adults. Apart from health considerations, the most unsavoury feature in overcrowding is lack of provision for separation of the sexes, and, out of the 1340 cases mentioned above, the facilities for sex separation was deficient in 459, while in 169 cases there was no separation of the sexes although overcrowding did not exist.

6. Insanitary Dwellings.

In 1933, three dwellings were voluntarily closed by arrangement with the owners owing to their being unfit for human habitation. It was/

was found impossible to close officially any insanitary dwellings during the year.

7. Applicants for new Houses, with Medical Certificates.

Over 1500 applicants for new houses have presented certificates from their family doctor certifying that, for medical reasons, the provision of other houses was essential. In such cases only the most clamant applications can be dealt with by the Selection Sub-Committee of the Housing Committee.

FACTORIES, WORKSHOPS AND WORKPLACES.

Factories - Table VI. is submitted giving details of the administration of the Factory and Workshop Act, 1901. No prosecutions had to be instituted under the Act, but a large number of defects discovered during the routine inspections was remedied.

Workshops - The number of workshops, exclusive of bakehouses, registered at the end of 1933 was 703, as compared with 696 in 1932.

Excellent work continues to be done by the Sanitary Inspector and his staff in the sanitary control of the workshops of the City. Every workshop is inspected at least once a year, and an effort is made to keep it in accordance with the requirements of the Public Health Act and the Factory and Workshop Acts. Fish-curing and provision-curing works are inspected very frequently, some of them almost daily, the primary object of the visit being the inspection of food. The majority of the defects found during 1933 had reference to lack of cleanliness.

TABLE VI. - ABERDEEN - FACTORIES, WORKSHOPS AND WORKPLACES, 1933.

1. - Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors.

	Number of		
	Inspections	Written Notices	Prosecutions
Factories (including Factory Laundries)	1319	175	0
Workshops (including Workshop Laundries)	1845	295	0
Workplaces (other than Outworkers' premises)	47	8	0
Total	3211	478	0

2. - Defects found in Factories, Workshops and Workplaces.

Particulars.	Number of Defects			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts [*]				
Want of Cleanliness	407	399	0	0
Want of Ventilation	0	0	0	0
Overcrowding	0	0	0	0
Want of drainage of floors ...	1	1	0	0
Other nuisances	48	45	0	0
Sanitary Accomm. Insufficient	2	2	0	0
Unsuitable or defective	20	19	0	0
Not separate for sexes	0	0	0	0
Offences under the Factory & Workshop Acts.				
Illegal occupation of underground bakehouse (s.101)	0	0	0	0
Other offences ... ... (excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Dept. of Health (Factories & Workshops Transfer of Powers) Order, 1921).	0	0	0	0
Total	478	466	0	0

[*] Including those specified in Sections 2, 3, 7 and 8 of the Factory & Workshop Act, 1901, as remediable under the Public Health Acts.

Bakehouses - The bakehouses, of which there were 80 in the City in 1933, being the same number as in the preceding year, were, as usual, inspected every quarter or oftener, and were found, on the whole, to be in a satisfactory condition. Certain sanitary defects in connection with bakehouses were remedied at the suggestion of the Health Department.

Home Workers - With regard to home workers, the usual routine inspections were made in connection with the sanitary condition of the premises and the prevention of infectious diseases.

Inspection of Plans - During the year under review, plans of 32 premises, chiefly alterations and additions to existing buildings, were examined and reported on. Certain recommendations in regard to the sanitary requirements of the premises were given effect to prior to the approval of the plans by the Town Council.

OFFENSIVE TRADES.

Slaughterhouses - At the end of 1933, although there were 5 licensed slaughterhouses within the City, slaughtering took place in only 4.

Other Offensive Trades - The offensive trades in Aberdeen, within the meaning of the Public Health Act, are concerned chiefly with tallow-melting or oil extracting from ox bones or fish livers, soap boiling, knackering, hide factoring, and the manufacture of manures and fish meal. At the end of the year, 22 firms were carrying on one or more offensive trade, and the total number of trades so conducted was 36.

New Applications for Establishment of Offensive Trades - No applications were received in the course of the year.

Number of Inspections made and manner and conduct of business - Excluding visits to slaughterhouses, the number of visits to premises in which offensive trades are being carried on was 2,248.

On the whole these offensive trades were conducted in a satisfactory manner. Complaints received were immediately investigated by the sanitary staff, and the proprietors were communicated with in those instances in which the sanitary inspector deemed such a procedure necessary.

ATMOSPHERIC CONDITIONS.

Weather and Disease - In Table VII. is summarised the state of the weather in Aberdeen for each month throughout the year under review.

As regards sunshine, the month which enjoyed the most sunshine was June, with 236 hours for the whole month, or eight hours a day; while the month with least sunshine was December, with 39 hours for the whole month, or fully one hour a day. As regards the actual percentage of possible sunshine, November and December were lowest with 19 per cent., as against 17 per cent. in preceding years. The total amount of sunshine for the year under review was much above the average for the years 1897-1926.

January was the coldest month, with a temperature of 36.9°F., the warmest month being July with a temperature of 61.7°F. The difference in temperature between the coldest and warmest months was 24.8°F, which was considerably above the average for the years 1897-1926 (17.4°F.) The mean temperature for the whole year was 48.1°F., the average for preceding years being 46.3°F. The mean daily range of temperature, or the difference between the highest and lowest for the day, averaged 10.1°F. in 1933.

During 1933, the driest months were June and September, with 0.9 inches/

TABLE VII. - ABERDEEN - METEOROLOGICAL RECORD FOR EACH MONTH (From King's College Observatory).

YEAR 1933.

MONTH	BAROMETRIC PRESSURE (at 32°F. and Sea Level)			TEMPERATURE OF ATMOSPHERE				Mean Daily Temp. of Ground (4 ft. below surface)	Relative Humidity Sat = 100.	RAINFALL.		SUNSHINE		WIND.									
														Direction; and Duration in Hours.									Velocity
	Absolute Highest	Absolute Lowest	Mean Daily Range	Absolute Highest	Absolute Lowest	Mean Daily Temp.	Mean Daily Range			Duration	Amount	Duration	Percentage of possible sunshine.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm	Average No. miles per day.
	Inches	Inches	Inches	$^{\circ}$F.	$^{\circ}$F.	$^{\circ}$F.	$^{\circ}$F.	$^{\circ}$F.	%	Hrs.	Inches	Hrs.											
January	30.72	28.84	0.31	55.2	21.7	36.9	9.3	42.2	83	77	1.9	53	23	1	-	18	6	255	227	177	53	7	230
February	30.63	28.87	0.24	55.2	27.3	38.2	8.2	40.1	82	179	3.7	70	27	41	3	60	70	55	95	111	231	6	309
March	30.40	28.95	0.22	63.9	29.5	43.4	10.5	41.8	79	74	2.0	157	43	18	11	56	71	302	115	101	55	15	252
April	30.53	29.55	0.18	61.0	30.7	46.0	10.8	43.6	80	86	2.0	113	26	83	42	53	101	167	72	83	118	1	214
May	30.25	29.58	0.11	66.0	32.5	48.6	9.6	47.2	82	41	1.0	125	25	93	34	129	140	118	5	15	206	4	190
June	30.40	29.07	0.14	71.6	40.8	56.1	12.2	52.3	78	48	0.9	236	45	91	39	92	100	148	22	27	197	4	210
July	30.53	29.34	0.17	78.8	50.4	61.7	12.1	56.7	78	99	3.1	164	31	30	45	41	124	209	61	112	113	9	168
August	30.35	29.26	0.20	80.8	43.9	59.9	13.2	57.7	77	56	1.2	188	40	28	8	30	48	227	135	158	103	7	187
September	30.56	29.56	0.16	67.3	39.9	54.5	12.2	56.3	85	39	0.9	148	39	45	42	98	82	157	31	34	229	2	186
October	30.52	29.01	0.26	64.2	33.6	49.0	8.5	53.2	81	138	4.7	66	20	59	38	66	71	83	119	108	199	1	279
November	30.36	29.40	0.19	58.3	29.5	43.6	7.4	47.4	83	160	3.3	47	19	43	6	58	151	103	72	99	185	3	260
December	30.88	29.33	0.22	48.7	29.5	39.6	7.3	43.2	82	104	1.9	39	19	10	6	49	142	118	134	91	193	1	208
Monthly Average	30.51	29.23	0.20	64.3	34.1	48.1	10.1	48.5	81	92	2.2	117	30	45	23	63	92	162	91	93	157	5	224
Total for Year.	...	...	...	...	...	...	...	...	...	1101	26.6	1406	...	542	274	750	1106	1942	1088	1116	1882	60	...

inches of rainfall. October was the wettest, with 4.7 inches of rainfall as against an average of 2.6 for the years 1897-1926. The total amount of rainfall was below the average for preceding years.

In 1933, the most prevalent winds in Aberdeen were from the south and north-west, the least prevalent winds being north-easterly winds.

WATER SUPPLY.

The following Table (Table VIII.) measuring in percentages the degree of purity of the water in terms of bacillus coli, provides evidence of the present state of the water as compared with the two previous years.

TABLE VIII - ABERDEEN - QUALITY OF WATER - TYPICAL BACILLUS COLI.

Year. Samples from -	Absent in 100 c.c. %	Present in 100 c.c. %	Present in 50 c.c. %	Present in 20 c.c. %	Present in 10 c.c. %	Present in 5 c.c. %	Present in 1 c.c. & less %
1933 Cairnton Intake -							
River Water at Intake	...	...	...	2	6	42	50
Aberdeen Tap Water	56	21	15	6	2	...	...
1932 River Water at Intake	...	...	...	2	4	47	47
Aberdeen Tap Water	71	13	15	1	...	...	...
1931 River Water at Intake	...	...	...	4	17	51	28
Aberdeen Tap Water	70	15	11	4	...	...	...
berdeen Tap Water, 1907, (i.e., before the Water was filtered).	...	...	13	...	29	33	25

CHAPTER IV.

SPECIAL HEALTH SERVICES.

MUNICIPAL HOSPITAL SERVICES.

(a) Woodend Hospital.

The diseases treated at Woodend Hospital, together with the beds available under each group, are as follows:-

(1) Infectious Diseases -		
Tuberculosis	148	
Pneumonia	30	
Rheumatism	6	
		184 beds.
(2) Cases coming within the purview of the Maternity Service and Child Welfare Scheme.		16 beds.
(3) General Diseases -		
Medical	74	
Surgical	50	
		124 beds.
Total... ...		324 beds.

The number of beds allocated as between medical and surgical cases in the above-named category is fluctuating, because, in senile cases, there is interchangeability in medical and surgical beds. The actual number of beds available for acute cases is 50 for surgical and 50 for medical cases.

Table IX. gives the number of admissions and discharges during 1933.

TABLE IX. - ABERDEEN - WOODEND HOSPITAL. Year 1933.

	In Hospital on December 31,1932.	Admitted during the year.	Discharged during the year.	Died in Hospital	In Hospital on December 31,1933.
A. - General Hospital.					
Surgical Cases ...	57	642	537	112	50
Medical Cases ...	87	840	687	164	76
Gynaecological Cases	9	182	166	5	20
Total ...	153	1,664	1,390	281	146
B. - Special Hospital.					
Tuberculosis -					
(a) Respiratory...	80	140	116	25	79
(b) Other ...	61	137	120	15	63
Rickets & Orthopaedic	10	19	20	0	9
Total ...	151	296	256	40	151
Total A and B ...	304	1,960	1,646	321	297

During 1933, the daily number of patients under treatment in the General Hospital varied from 123 to 182, the average daily number being 152. In the Special Hospital, the daily number of patients varied from 142 to 160, the average daily number being 151. In 1932, the average daily number of patients was 155 in the General Hospital and 141 in the Special Hospital.

In 1933, the total number of Public Assistance cases admitted was 806, with 211 deaths, as compared with 777 admissions and 182 deaths in 1932. With regard to cases from the County of Aberdeen and other Counties, there were in 1933, 126 ordinary admissions with 15 deaths, whereas from the same areas, 143 cases of tuberculosis were admitted and of these 18 died; the corresponding figures for 1932 were 78 ordinary admissions with 10 deaths, and 146 cases of tuberculosis with 13 deaths.

The operations performed during the year numbered 517, of which 447 were performed under general or spinal anaesthesia.

In June, 1929, arrangements were come to with the Directors of the Aberdeen Royal Infirmary whereby the surgical waiting list of that institution would be decreased by the admission to Woodend Hospital of surgical cases whenever beds were available in the latter institution. During 1933, under this arrangement, 197 general surgical cases were dealt with. These cases were investigated and treated in Woodend Hospital by the surgeons of the Royal Infirmary, who had, in almost all cases, seen the patients in the first instance at the Out-patient Department of the Infirmary.

X-ray Department. A total of 1,686 cases attended the X-ray Department, 2,640 plates being taken.

(b) Oldmill Hospital - Medical Report.

During 1933, the medical administration of Oldmill Hospital was carried on as in previous years, and the arrangements for the treatment of Public Assistance cases sent to the institution were found to be adequate and worked satisfactorily.

The medical administration is as follows:-

1. All cases arriving for admission are medically examined and are thereafter allocated either to wards in Woodend Hospital or to the ordinary wards in Oldmill Hospital, according to the findings of the examining Medical Officer. By this means, sick cases are admitted direct to Woodend Hospital
2. The Medical Officer pays a daily visit to Oldmill Hospital for the purpose of (a) examining inmates who report sick, (b) removing to Woodend Hospital such persons as require special nursing and treatment, and (c) directing treatment in minor ailments (e.g. cuts and bruises) which can be carried out successfully in Oldmill Hospital by a trained nurse from Woodend Hospital.
3. All children are examined monthly or at any other time on request by the Chief Public Assistance Officer. Medical reports are furnished with regard to fitness for "boarding-out".
4. All dormitories, beds, lavatories, clothing, food and cooking arrangements are periodically inspected.

The usual classification of cases was found to be satisfactory, viz:-

1. Infants, under 2 years of age.
2. Children, from 2-15 years of age.
3. Sick persons.
4. Aged and infirm persons.
5. Ordinary cases.

All/

All children under 2 years of age are admitted to Woodend Hospital from which a number of healthy children are later transferred to Thorngrove Home for Mothers and Babies according to available accommodation in the latter institution. All sick infants are treated in Woodend Hospital.

At Oldmill Hospital, a Nursery is set aside for the accommodation of children between the ages of 2 and 15 years. The Nursery is a separate building and accommodates children only.

All inmates requiring medical or surgical hospital treatment are transferred to Woodend Hospital, irrespective of age.

Aged and infirm cases are removed from Oldmill Hospital to Woodend Hospital when their physical or mental condition necessitates treatment in the sick wards.

Admissions. - The number of Public Assistance cases admitted to Woodend Hospital during 1933 was as follows:-

	Males.	Females.	Total.
Transferred from Oldmill Hospital Wards...	138	95	233
Transferred on admission to Oldmill Hospital ...	310	263	573
Total	...	...	806.

Of the total number, 117 were children.

Discharges from Woodend Hospital.	Males.	Females.	Total.
	342	265	607.

Deaths. - During the year, 211 Public Assistance cases died in Woodend Hospital.

In January, 1933, an outbreak of influenza occurred in Oldmill Hospital and the sick ward accommodation in Woodend Hospital was taxed to the utmost. Fortunately, the disease was of a mild type; it was found impossible to remove every case to the sick wards and the milder cases were isolated and treated in Oldmill Hospital.

During June, tinea barbae broke out amongst the male inmates of Oldmill Hospital. In all, 21 persons were affected. Regulations regarding the use of towels and shaving utensils were laid down and further spread of the disease was thus prevented. All cases made good recoveries.

In the Nursery the following infectious diseases were encountered:-

Chickenpox	3 cases.
Scarlet Fever. ...	2 cases.
Measles	1 case.

These cases were removed to the City Hospital and all recovered completely.

Many beds in Woodend Hospital are permanently occupied by aged persons, who, although unsuitable for Oldmill Hospital, do not require the expert nursing and medical attention which is provided in Woodend Hospital. As no alternative accommodation at present exists for this type of case, there is in consequence a limitation of beds available for the treatment of cases of acute illness.

In Oldmill Hospital, the dietary is on an adequate scale; the sanitary arrangements are good and the cleanliness and state of repair of the buildings are excellent.

The utmost harmony exists between the two hospitals and the medical administration works smoothly.

(c) City Hospital.

The total number of beds available in the City Hospital is 285. There is a mobile ward of 60 beds which may be used for diphtheria, scarlet fever, puerperal fever and pyrexia, or tuberculosis.

The admissions to the City Hospital during 1933 are shown in the following table:-

TABLE X. - ABERDEEN - CITY HOSPITAL. Year 1933.

	In Hospital on December 31, 1932.	Admitted during the year.	Discharged during the year.	Died in Hospital.	In Hospital on December 31, 1933.
Smallpox	-	-	-	-	-
Chickenpox	-	4	4	-	-
Scarlet Fever	29	1,029	890	4	164
Diphtheria	17	315	267	13	52
Enterica Infections ...	-	12	10	-	2
Dysentery	3	45	47	1	-
Cerebro-spinal Meningitis	1	15	6	9	1
Acute Poliomyelitis	-	14	5	-	9
Acute Pneumonias ...	29	202	180	26	25
Tuberculosis	48	92	83	25	32
Erysipelas	5	63	54	6	8
Puerperal Fever and Pyrexia	13	124	114	14	9
Measles	-	40	39	1	-
Whooping Cough... ...	2	28	21	9	-
Venereal Diseases ...	4	39	43	-	-
Ailing Infants... ...	22	125	111	25	11
Miscellaneous Cases ...	4	160	134	24	6
Total ...	177	2,307	2,008	157	319

Of the 2,307 admissions, 206 cases were admitted from areas outside the City. There were 157 deaths, of which 31 were among County cases.

The admissions from areas outwith the City were as follows:-

	Cases.	Deaths.
Scarlet Fever	27	-
Diphtheria	22	2
Enterica Infections... ...	3	-
Dysentery	1	-
Cerebro-spinal Meningitis ...	10	6
Acute Poliomyelitis... ...	9	-
Acute Pneumonias	9	-
Tuberculosis	9	5
Erysipelas	8	-
Puerperal Fever and Pyrexia..	45	8
Measles	4	-
Whooping Cough	1	1
Ailing Infants	19	4
Miscellaneous Cases... ...	39	5
	206	31

The daily number of patients under treatment varied from 161 to 330, the average daily number being 213.

The operations performed at the City Hospital during the year numbered/

numbered 729, of which 244 were carried out under general or spinal anaesthesia.

X-ray Department. A total of 985 cases attended the X-ray Department; 1,170 plates being taken.

Cleansing Block and Skin Department. Table XI. shows that during the year the number of verminous persons, whether members of families with children of school age or not, disinfected at the City Hospital Cleansing Department was 105, as compared with an annual average of 190 in the 1928-1932 quinquennium. This table also shows that a total of 723 persons was treated for scabies in the skin wards of the Cleansing Department, as compared with an annual average of 349 in the preceding five years.

TABLE XI. - ABERDEEN - CLEANSING STATION - 1933.

	Age-Groups (Years).				All Ages. 1933.	Average 1928-32.
	0-5	5-15	15-25	25 +		
Verminous Persons Cleansed	14	38	8	45	105	190
Scabies Cases Treated	100	266	106	251	723	349
Total ...	114	304	114	296	828	539

(d) Kingseat Mental Hospital.

Statistics relating to Kingseat Mental Hospital are dealt with in the section of the Report relating to Mental Health Services.

TUBERCULOSIS SERVICES.

Mortality - While there was a moderate increase in the number of deaths from pulmonary tuberculosis in 1933 as compared with 1932 - which year was distinguished by the lowest mortality from pulmonary tuberculosis recorded in Aberdeen - the death-rate from non-pulmonary tuberculosis in 1933 showed a decline sufficient to make the death-rate from all tuberculosis the lowest on record. There has been, during the last few years, an accentuation of the almost uninterrupted decline of mortality from non-pulmonary tuberculosis characterising the last seventy years. In 1933, there were 20 deaths from tuberculosis of organs other than the lungs, as against 45 in 1932 and 68 in 1923. A much larger proportion of non-pulmonary tuberculosis than of pulmonary tuberculosis is due to infection by the bovine type of the tubercle bacillus, i.e., from cows' milk. Taking as a basis of computation the accepted proportions of bovine infection in the various sites of non-pulmonary tuberculosis, it may be deduced that 7 or 8 deaths were in 1933 due to the bovine type of the bacillus. A much smaller proportion of cases of pulmonary tuberculosis is due to infection by the bovine organism, and there may properly be added to these 7 or 8 deaths perhaps 4 per cent. of the 93 deaths from pulmonary tuberculosis. Some 11 or 12 deaths then, in all, may be due to infection from the tubercle bacilli got from milk from tuberculous cows. This, a maximum figure in all probability, gives some idea of the comparative importance of bovine infection in the mortality from tuberculosis. Bovine infection seems to be more prevalent in Scotland than in England, not only in respect of the non-pulmonary type, but also of the pulmonary type. As has been stated, about 4 per cent. of cases of pulmonary tuberculosis investigated from this point of view in Scotland have been shown to have been infected by the bovine organism, whereas in England, and indeed elsewhere, the proportion had been found to be little more than 1 per cent.

It is interesting to compare the tuberculosis mortality in 1933 with that of 1913, the year following the official initiation of anti-tuberculosis work in the City. In 1913, the death-rate from all tuberculosis was 165 per 100,000 of population, comprising 105 pulmonary tuberculosis and 60 other tuberculosis. In 1933, the death-rate from all tuberculosis was 66, 54 from pulmonary and 12 from tuberculosis in parts of the body other than the lungs. The present death-rate from pulmonary tuberculosis/

TABLE XII. - ABERDEEN. - MORTALITY FROM TUBERCULOSIS IN YEARS 1856-1933.[x]

per 100,000 of Population.

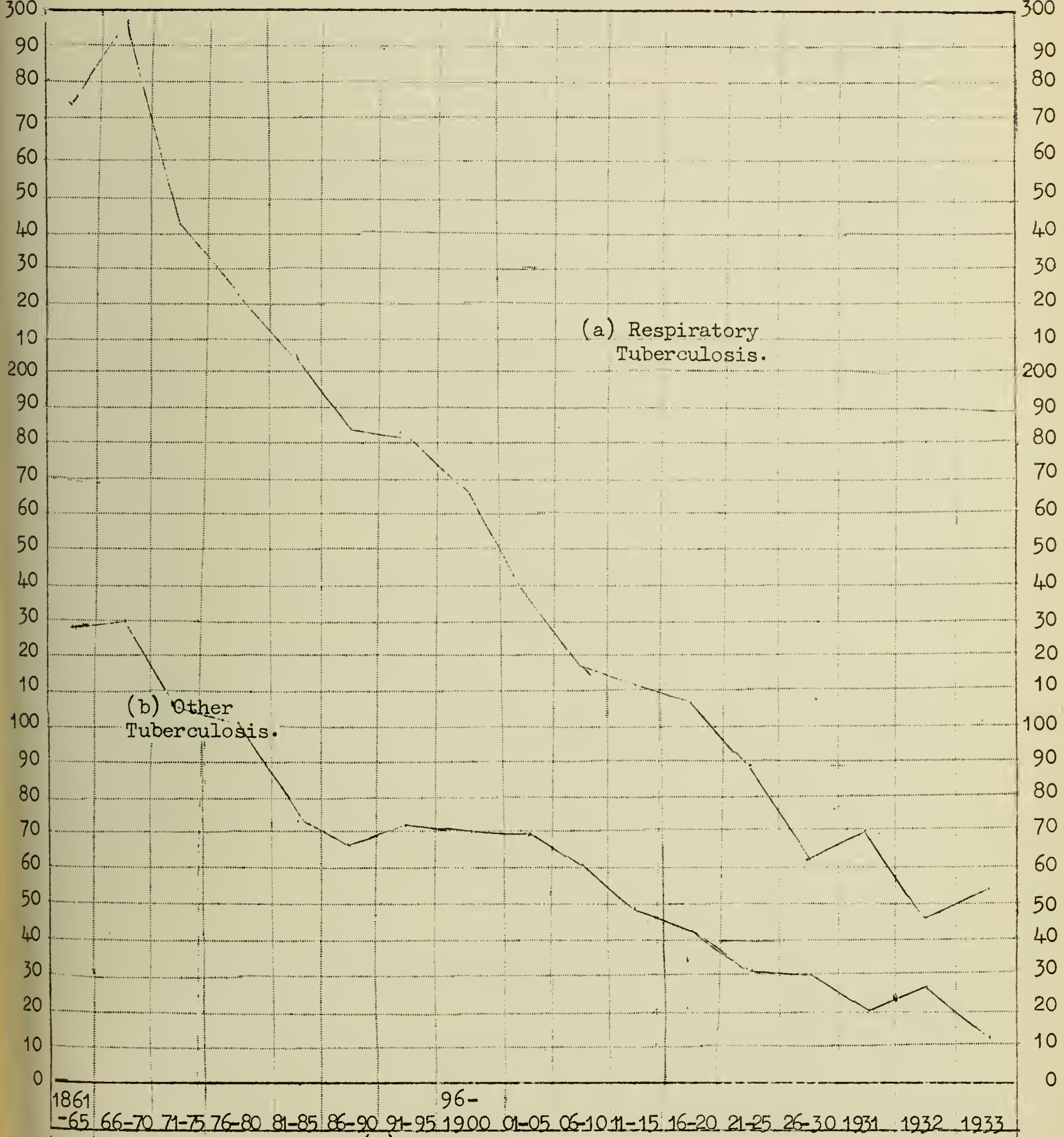
Period.	Respiratory Tuberculosis.			Other Tuberculous Diseases.			All Tuberculous Diseases.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
1856-60 .	333	312	322	235	135	179	568	447	501
1861-65 .	267	279	274	158	103	128	425	382	402
1866-70 .	295	300	298	170	98	130	465	398	428
1871-75 .	234	250	243	129	89	107	363	339	350
1876-80 .	217	228	223	112	92	101	329	320	324
1881-85 .	189	216	204	90	62	74	279	278	278
1886-90 .	179	188	184	76	60	67	255	248	251
1891-95 .	179	183	181	83	62	72	262	245	253
1896-1900 .	166	168	167	77	64	70	243	232	237
1901-05 .	143	134	138	79	62	69	222	196	207
1906-10 .	119	113	116	74	51	61	193	164	178
1911-15 .	125	99	111	53	47	49	177	146	160
1916-20 .	104	107	106	49	39	43	153	146	149
1921-25 .	99	81	88	37	27	31	136	108	119
1926-30 .	68	57	62	34	27	30	102	84	92
1931 . .	83	57	69	32	13	21	114	70	90
1932 . .	56	37	46	33	22	26	89	59	72
1933 . .	76	35	54	14	10	12	90	45	66

[x] Corrected for transferred deaths in 1904 and subsequent years.

ABERDEEN - TUBERCULOSIS, 1861-1933 - QUINQUENNIAL PERIODS.

All Ages. Both Sexes.

Deaths per 100,000 of Population.



1861-65	66-70	71-75	76-80	81-85	86-90	91-95	96-1900	01-05	06-10	11-15	16-20	21-25	26-30	1931	1932	1933
(a) Respiratory Tuberculosis.																
274	298	243	223	204	184	181	167	138	116	111	106	88	62	69	46	54
(b) Other Tuberculosis.																
128	130	107	101	74	67	72	70	69	61	49	43	31	30	21	26	12

(Corrected for transferred deaths in 1904 and subsequent years).

tuberculosis is, therefore, almost half; the death-rate from non-pulmonary tuberculosis is one-fifth; and the death-rate from all tuberculosis is two-fifths of the corresponding rates of twenty years ago.

Table XII., as also the accompanying chart (pp.26 and 27) shows the great fall in the tuberculosis death-rate during the last seventy years.

Notifications - Table XIII.(A) gives the number of tuberculosis cases notified during the year, divided into pulmonary and non-pulmonary cases, and arranged according to sex and age-period. During 1933, 128 cases of pulmonary tuberculosis were notified as against an annual average of 187 in the preceding ten years. There were 55 cases of other forms of tuberculosis notified in 1933 as against an annual average of 115 in the 1923-1932 decennium.

As regards the Site of the Disease, in the 55 cases notified as suffering from tuberculosis other than pulmonary, 4 were suffering from abdominal tuberculosis, 9 from tuberculous meningitis, 17 from tubercle of bones and joints (including the spine), 20 from tuberculous glands (mainly cervical), and 5 from generalised and other tuberculosis.

There were 4 deaths of abdominal cases, 8 of meningitis cases, 3 of cases of bones and joints and 5 of other cases.

As regards the number of cases notified during the year in which diagnosis of tuberculosis was confirmed by the Tuberculosis Medical Officer, Table XIII.(A) shows that the diagnosis was confirmed in 110 pulmonary cases and 38 non-pulmonary cases, a total of 148 cases.

Table XIII.(B) shows the number of persons belonging to Aberdeen at 31st December, 1933, who were known to be suffering from tuberculosis. The numbers are - 393 pulmonary cases and 176 non-pulmonary cases, a total of 569 persons.

Table XIII.(C) gives particulars of those who died during 1933, detailing the period that elapsed between notification and death and between discharge from an institution and death.

Institutional Treatment - Table XIII.(D) gives the number of notified and un-notified cases which received treatment under the Tuberculosis Scheme in sanatoria or other institutions during 1933. Of the 270 cases admitted, 163 were cases of pulmonary tuberculosis and 107 were cases of non-pulmonary tuberculosis. The number of notified cases admitted to each institution is as undernoted.

TUBERCULOSIS CASES NOTIFIED AND RECEIVING INDOOR INSTITUTIONAL TREATMENT.

	1933.		
	Pulm. Tubercle.	Other Tubercle.	Total.
City Hospital - Wards and Shelters ...	67	6	73
Woodend Hospital - Wards and Shelters	88	47	135
Royal Infirmary	7	6	13
Kingseat Mental Hospital..	4	1	5
Royal Hospital for Sick Children ...	3	9	12
Linn Moor Home (for children)... ...	-	9	9
Nursing Home	1	-	1
Total Admissions ...	170	78	248
Deduct cases treated in two institutions	7	4	11
	163	74	237

As/

TABLE XIII. - ABERDEEN - (A). CASES OF TUBERCULOSIS NOTIFIED IN 1933.

		NUMBER OF CASES NOTIFIED AS SUFFERING FROM TUBERCULOSIS.									Number of cases notified during year in which diagnosis of Tuberculosis has been confirmed.	
		AGE-GROUPS.										
		Under 5	5-10	10-15	15-25	25-35	35-45	45-65	65 upwards	Total.	Under 15	15 and upwards
Pulmonary	Males	3	1	-	15	14	12	22	2	69	1	63
	Females	3	-	2	13	17	13	6	5	59	4	42
Non-Pulmonary	Males	9	2	2	8	2	1	1	1	26	10	8
	Females	6	4	4	4	7	3	-	1	29	9	11

(B) NUMBER OF PERSONS BELONGING TO ABERDEEN AT 31st DECEMBER, 1933, WHO WERE KNOWN TO BE SUFFERING FROM TUBERCULOSIS.

		Number of Known Cases.								Total.
		Under 5	5-10	10-15	15-25	25-35	35-45	45-65	65 upwards	
Pulmonary.										
1. Sputum not present.	Males	-	-	2	1	1	2	1	-	7
	Females	1	-	-	1	2	4	2	-	10
2. Sputum present but not examined	Males	-	-	-	-	-	-	-	-	-
	Females	-	-	-	1	-	-	-	-	1
3. Sputum examined and tubercle bacilli found	Males	-	3	2	25	52	52	49	1	184
	Females	-	-	2	33	58	28	15	1	137
4. Sputum examined and tubercle bacilli never found.	Males	-	-	1	8	9	4	7	1	30
	Females	-	-	3	3	7	6	5	-	24
Total:		1	3	10	72	129	96	79	3	393
Non-Pulmonary.										
1. Abdominal	Males	-	-	3	5	-	1	1	-	10
	Females	1	1	3	8	-	-	-	-	13
2. Thoracic	Males	1	-	1	1	-	-	-	-	3
	Females	1	1	6	2	-	-	-	-	10
3. Spine	Males	1	4	3	2	1	1	-	-	12
	Females	1	3	2	2	-	-	1	-	9
4. Bones and Joints (exclusive of spine)	Males	2	4	3	7	2	1	-	-	19
	Females	-	3	5	5	5	2	-	-	20
5. Superficial glands	Males	4	2	3	2	-	-	-	1	12
	Females	1	4	3	6	6	3	-	-	23
6. Lupus	Males	-	-	-	2	1	1	1	1	6
	Females	-	-	-	1	3	1	6	3	14
7. Other parts or organs	Males	-	-	2	7	-	5	4	-	18
	Females	-	1	1	-	3	1	1	-	7
Total:		12	23	35	50	21	16	14	5	176
Pulmonary and Non-Pulmonary Total:		13	26	45	122	150	112	93	8	569

TABLE XIII - (C). NUMBER OF PERSONS WHO DIED FROM TUBERCULOSIS IN ABERDEEN DURING THE YEAR, WITH PARTICULARS AS TO PERIOD ELAPSING BETWEEN NOTIFICATION AND DEATH AND BETWEEN DISCHARGE FROM AN INSTITUTION AND DEATH.

	Pulmonary.		Non-Pulmonary.	
	Males.	Females.	Males.	Females.
Number of persons who died from tuberculosis	60	33	10	10
Of whom -				
Not notified or notified only at or after death	5	9	3	5
Notified less than 1 month before death	2	1	3	1
" from 1 to 3 months " "	9	4	-	-
" " 3 to 6 " " "	6	3	1	1
" " 6 to 12 " " "	6	4	-	1
" " 1 to 2 years " "	6	3	1	-
" over 2 years " "	26	9	2	2
Number who died within 28 days after discharge from an institution	3	-	2	1
Number who died more than 28 days after discharge from an institution	15	9	-	2

Corrected for transferred deaths.

(D). NUMBER OF CASES WHICH RECEIVED TREATMENT UNDER THE TUBERCULOSIS SCHEME IN SANATORIA OR OTHER INSTITUTIONS DURING THE YEAR ENDED 31st DECEMBER, 1933.

		Number of Patients.					
		In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	✱ Died in the Institutions		In Institutions on Dec. 31.
		1.	2.	3.	4.	5.	6.
Pulmonary.							
*Adults ...	Males	52	85	66	18	7	46
	Females	32	66	48	14	-	36
Children	Males	12	3	10	1	3	1
	Females	3	9	7	1	1	3
Non-Pulmonary.							
*Adults ...	Males	6	14	5	3	2	10
	Females	3	20	11	2	2	8
Children	Males	5	39	32	-	1	11
	Females	5	34	28	-	3	8
Total:		118	270	207	39	19	123

✱ In column 4 are those who were in final residence 28 days or over. In column 5 are those who were in final residence under 28 days.

* All patients of 15 years and upwards are classed as adults.

As to outdoor institutional treatment, 766 cases, all of which were of pulmonary tuberculosis except 246, received treatment at the Tuberculosis Institute at the City Hospital. The total number of attendances during the year was 6,158.

Insured Persons (National Health Insurance Act). Of the 128 cases of pulmonary tuberculosis notified, 71 were insured persons, 55 being male and 16 female. The notified cases of other forms of tuberculosis included 11 insured persons - 5 males and 6 females.

As stated in previous Reports, the Town Council have now assumed full financial responsibility for the treatment of insured tuberculous patients. During the year, the number of prescriptions passed for payment amounted to 1,536.

Food Supply. During 1933, food - chiefly milk - was supplied to an average daily total of 15 patients receiving dispensary or domiciliary treatment.

Supervision of Cases. The Tuberculosis Medical Officer had the assistance of three Tuberculosis Health Visitors or Nurses in the visitation and supervision of tuberculous cases throughout the year. The number of visits made by the Tuberculosis Health Visitors during the year under review was 7,429.

Size of House and Density of Occupancy. Table XIV. gives the number of cases occurring in houses of different sizes, along with the average number of inmates. In the case of pulmonary tuberculosis, the average number of inmates, including the patient, varied from 2.8 in one-roomed houses to 5.4 in four-roomed houses, and 6.0 in houses of 5 rooms and upwards. The average for houses of all sizes taken together was 4.6

TABLE XIV. - ABERDEEN - TUBERCULOSIS - SIZE OF HOUSE IN RELATION TO NOTIFIED CASES AND REGISTERED DEATHS DURING 1933.

		1 Room	2 Rooms	3 Rooms	4 Rooms	5 Rooms & up.	Institutional or not stated.	Totals for 1933.	Corresponding Totals for	
									1932.	1931.
Pulmonary Tuberculosis (Cases)	Male	6	25	22	7	5	4	69	90	80
	Female	11	14	17	2	5	10	59	50	66
Both Sexes ...	Cases	17	39	39	9	10	14	128	140	146
	Deaths	11	28	23	10	6	15	93	79	116
Average number of inmates, including Patient.		2.8	4.5	5.0	5.4	6.0	...	4.6	4.3	4.6
Other Tuberculosis (Cases)	Male	3	9	6	3	2	3	26	38	55
	Female	5	9	10	1	2	2	29	49	39
Both Sexes ...	Cases	8	18	16	4	4	5	55	87	94
	Deaths	1	11	3	3	2	0	20	45	36
Average number of inmates, including Patient.		2.9	4.6	5.9	3.0	3.3	...	4.8	5.3	4.9
*Houses in City at Census, 1931. Average Number of Inmates.		2.5	3.9	4.2	4.1	4.4	...	4.0	...	...

* Houses of 25 rooms and over are excluded.

In the cases of other forms of tuberculosis, the average ran from 2.9 for one-roomed houses to 3.0 for four-roomed houses, and 3.3 for houses/

houses of five rooms and upwards. The average for all houses was 4.8

As regards the position of the tuberculous cases in relation to room and bed accommodation at the time of notification, it was found that of the 128 cases of pulmonary tuberculosis, only 33, or 26 per cent., were occupying a separate bed in a separate room, and 22, or 17 per cent., had a separate bed but not a separate room. About 52 per cent. had neither a separate bed nor a separate room.

Loan of Beds. In order to facilitate the separation of the patient from the other members of the household, 13 beds or cots, with the necessary bedding, were given on loan to needful patients. On the last day of the year there were on loan 34 beds with bedding.

MATERNITY AND CHILD WELFARE SERVICES.

Infantile Mortality. During the year 1933, there were 238 deaths among children under one year of age, as compared with an average of 293 during the 1928-1932 quinquennium. The infant-mortality rate, expressed as deaths per 1,000 births, was 79 during 1933, which is the lowest rate yet recorded, the lowest one in previous years being 80 in 1930. The average rate during the preceding quinquennium was 90.

The chief causes of mortality among infants in 1933, as appearing in Table XV., were bronchitis and pneumonia, with 59 deaths, as against an average of 71 for the preceding quinquennium; and prematurity with 61 deaths, as against 62.

All the specific infectious diseases show a decrease in 1933 as compared with the preceding quinquennium. There were 7 deaths from whooping cough as against an average of 14 in the preceding five years; 4 deaths from measles as against 10; and 2 deaths from tuberculosis as against an average of 7 in the preceding five years.

In Table XVI. the causes of death are somewhat differently grouped from those in Table XV. and death-rates are substituted for numbers and deaths.

In Table XVI. also, two interesting columns show the number of infants surviving at the end of one year from birth, and the proportions which the survivors bear to the population. This rate, which represents the net gain to the population, after the perils peculiar to the first year of life have been passed, was, in 1933, 16.2 per 1,000 of population, as compared with an average of 18.2 for the ten years 1923-1932. This rate is a more exact indication than the birth-rate of the real internal addition to the population.

Births. The figures of the births registered in Aberdeen during 1933 are analysed in detail in Chapter V. of this Report.

The particulars regarding the live-births and still-births occurring during the year are as follows:-

Attended by -	No. of Live Births	No. of Still Births.	No. of Still Births per 1,000 Live Births.
Midwives	593	17	28.7
Maternity Hospital:			
(a) In Wards	636	72	113.2
(b) At Home	211	6	28.4
Medical Practitioners ...	1737	71	40.9
Not attended at birth ...	2	-	-
	3179	166	52.2

The/

TABLE XV. - CAUSES OF DEATH AMONG CHILDREN UNDER FIVE YEARS OF AGE - YEAR 1933.

Causes of Death.	AGE																	Average for preceding 5 years. (1928-1932).	
	First Year.												Second to Fifth Years.						
	First Four Weeks				First Three Mos			The Four Quarters											
	0-1	-2	-3	-4	x 0-1	-2	-3	x 0-3	-6	-9	-12	Total	-2	-3	-4	-5	Total	0-1	1-5
Chicken-pox												-					-	-	0.2
Measles									1	1	2	4	3	1			4	10	11
Scarlet Fever												-		1	1	1	3	0.4	2
Whooping Cough									3	2	2	7	8	2			10	14	10
Diphtheria												-	1	2		1	4	1	5
Erysipelas									1	1	1	3	1				1	2	0.2
Epidemic Cerebro-Spinal Meningitis						1		1		1		2	1				1	1	1
Tuberculosis of (a) Brain											2	2	1			2	3	4	9
(b) Abdomen												-					-	1	3
(c) Lungs												-	1	3			4	1	2
(d) Other forms												-			1		1	1	2
Meningitis										1	2	3					-	3	1
Hydrocephalus												-					-	0.2	0.2
Convulsions	2	1	2	2	7	1	1	9	5	1		15					-	11	2
Pneumonia			3		3	5	2	10	12	11	12	45	21	7	3	2	33	53	28
Bronchitis					1	2		3	5	4	2	14	2				2	18	0.4
Diarrhoea and Enteritis	1		1		2	2	4	8	4	3	2	17	2				2	17	4
Other Digestive Diseases										1		1	2		4		6	5	2
Congenital Malformations	2	1			3	2	2	7	1			8	1				1	9	-
Congenital Heart	3				3	1		4				4					-	4	0.2
Prematurity	46	6	5		57	4		61				61				1	1	62	-
Atrophy, Debility and Marasmus	5		1	2	10	6	2	18	6	1		25	1				1	38	0.4
Atelectasis	6		1		7			7				7					-	9	-
Injury at Birth	8				8			8				8					-	6	-
Syphilis												-					-	1	0.2
Burns and Scalds											1	1	1				1	1	3
Suffocation			1		1		1	2	2			4					-	4	-
Other Accidents												-	1	1	3	2	7	1	6
Other Causes	3				3	1		4	2		1	7	3	1	2	3	9	15	8
All Causes	76	8	14	4	105	25	12	142	42	27	27	238	50	18	14	12	94	293	101
Average for preceding 5 years.	75	18	16	8	120	28	25	173	50	36	34	293	55	21	13	12	101		

x This column includes all deaths in preceding columns.

TABLE XVI. - ABERDEEN - INFANT MORTALITY. - Years 1923-1933.

(Corrected for transferred deaths).

Year	No. of Births.	Births per 1,000 of Population.	Deaths of Infants under 1 year.	Deaths of Infants under 1 year per 1,000 Births.	No. of Survivors.	Survivors per 1,000 of Population.	Death-Rates Among Children Under 1 year of Age From Chief Causes per 1,000 Births.										Death-Rates from All Causes, per 1,000 Births, at Ages -		
										Common Zymotic Diseases									
							Prematurity, Congenital Defects, and Dis. of Early Infancy.	Dis. of Digest. System Wasting and Debility Convulsions.	Bronchitis and Pneumonia.	Measles.	Whooping Cough.	Diphtheria.	Scarlet Fever.	Tuberculosis.	Syphilis.	Suffocation.	Under 2 Weeks	Above 2 Weeks and under 6 Months	Above 6 Months and under 1 Year.
1933	3019	17.6	238	79	2781	16.2	30	19	20	1	2	0	0	0.7	0	1	28	33	18
1932	3188	18.7	296	93	2892	17.0	33	18	22	4	7	0.3	0	2	0.6	1	29	41	23
1931	3231	19.2	292	90	2939	17.4	31	17	27	2	5	0	0.6	3	0	0.6	29	41	20
1930	3303	19.7	265	80	3038	18.1	24	18	21	3	3	0.3	0	1	0	2	23	38	19
1929	3112	18.7	297	95	2815	16.9	31	27	24	0	2	1	0	3	0.3	2	31	41	23
1928	3314	19.9	313	94	2999	18.1	27	29	17	6	5	0.3	0	2	0.3	2	30	40	24
Aver. 1928-1932.	3230	19.2	293	90	2937	17.5	29	22	22	3	4	0.4	0.1	2	0.2	1.5	28	40	22
1927	3182	19.3	334	105	2848	17.3	38	29	25	0.3	2	0	0	3	2	1	40	45	20
1926	3406	20.7	328	96	3078	18.7	30	31	17	2	3	1	0	4	1	1	27	44	25
1925	3390	20.8	368	109	3022	18.5	34	37	18	4	6	1	0	3	1	0.3	31	53	25
1924	3437	21.2	421	122	3016	18.6	33	36	22	6	8	1	0	3	2	2	33	57	32
1923	3766	23.3	391	104	3375	20.9	30	42	18	3	1	0	0	3	3	1	33	51	20
Aver. 1923-1927.	3436	21.1	368	107	3068	18.8	33	35	20	3	4	1	0	3	2	1	33	50	24
Aver. 1923-1932.	3333	20.2	331	99	3002	18.2	31	28	21	3	4	0.5	0.1	3	1	1.3	31	45	23

The bodies of 17 still-born children or children who had died soon after birth were examined for spirochetes. One proved to be syphilitic.

Maternal Mortality. During the year under review, there were 20 deaths of women from causes associated with pregnancy or child-birth, including all deaths, whatever the precise cause, within four weeks after child-birth (or later if illness originated in the puerperium). Of these 20 deaths, 16 were classified by the Registrar General as due to pregnancy and child-birth.

All these deaths were inquired into by the Health Visitors or information regarding them was obtained from the attending medical practitioners, who co-operate in giving the desired information.

Year.	Number of Births (Corrected for Transfers).	Maternal Deaths.		Puerperal Sepsis.	
		Number of Deaths.	Rate per 1,000 Births.	Number of Deaths.	Rate per 1,000 Births.
1933	3,019	20	6.6	6	2.0
1932	3,188	25	7.8	14	4.4
1931	3,231	13	4.0	6	1.9
1930	3,303	20	6.1	4	1.2
1929	3,112	24	7.7	5	1.6
1928	3,314	25	7.5	9	2.7
Average 1928-32	3,230	21	6.6	7	2.4

It will be seen from the table that during 1933 there were 6.6 maternal deaths per 1,000 births, and of these the deaths from sepsis were 2.0 per 1,000 births. In the quinquennium 1928-32, the average maternal death-rate was 6.6, and the sepsis death-rate 2.4

There was one death among the confinements attended by midwives. In 6 cases the patients were attended by general medical practitioners in their own homes and 2 by doctors in maternity homes, and in the remaining 11 cases by public institutions.

Three of the deaths were associated with pregnancy. In 8 others, delivery took place prematurely. The remaining 9 deaths were due to or associated with full-time deliveries. One patient died in her own home, the remainder in institutions.

As far as can be ascertained from the records, the confinement which proved fatal was the first in 8 cases.

Report under Midwives (Scotland) Act, 1915.

The report for the year 1933 under the Midwives (Scotland) Act, 1915, has already been transmitted to the Central Midwives Board.

The number of Midwives who, during the year, intimated their intention to practise in the district was 15.

Home Visitation.

A record of the number of first visits and re-visits to infants under 1 year of age, to children in the 1-5 year period, and to expectant mothers, is here submitted:-

Infants under One Year.				Children One to Five Years.				Ante-Natal Cases.	
First Visits		Re-Visits		First Visits		Re-Visits		First Visits	Re-Visits.
Legit.	Illegit.	Legit.	Illegit.	Legit.	Illegit.	Legit.	Illegit		
2,801	170	31,333	2,449	950	98	6,726	431	169	132
2,971		33,782		1,048		7,157		301	
36,753				8,205					

Voluntary Health Visitors' Report.

The Voluntary Health Visitors' report, which is separately submitted, indicates the valuable contribution that is made to the work of Maternity and Child Welfare by the voluntary workers.

Ante-Natal Consultations.

The extent of the ante-natal work undertaken during the year is summarised as follows:-

	Maternity Hospital Ante-Natal Annexe.	City Hospital Ante-Natal Clinic.	Child Welfare Clinics.
Total Number of Attendances	3,368	294 + 99[*] + 83[X]	375
Total First Attendances ...	944	161 + 44[*] + 40[X]	314

[*] Post-Natal Cases.
[X] Not Pregnant.

Post-Natal and other Consultations.

There were 1,423 post-natal consultations during the year, of which 733 were first attendances.

Child Welfare Consultations.

The extent of the work done at the Child Welfare Clinics is summarised as follows:-

(a) Total number of attendances - (1) Under 1 year of age 5,122
(2) Over 1 year of age 2,336

(b) Number of first attendances - (1) Under 1 year of age 1,921
(2) Over 1 year of age 1,215

Special Treatment Centres.

(1) Teeth. - The Dental Clinic provided the following services:-

(a) Number of Attendances - (1) Mothers 435 (352 cases)
(2) Children 590 (564 cases)

(b) Classified Summary of Conditions remedied:-

	Extractions	General Anaesthetics	Anaesthetic (Local)	Fillings	Scalings
(1) Mothers	2,355	416	6	6	3
(2) Children	2,168	590	0	0	0

(c) Number of Dentures supplied - Nil.

(d) Net cost of Dentures, less sums recovered - Nil.

(2) Eyes. - The Ophthalmic Clinic was utilised to the extent of providing treatment for 33 cases of strabismus.

(3) /

(3) Ultra-violet Light Clinic. (Duration of Clinic 5½ months).

Children under 5 years of age treated at City Hospital:-

Disease.	Cured.	Improved.	Stationary.	Worse.	TOTAL.
Rickets	8	12	29	1	50
Wasting and Debility	1	4	6	-	11
Adenopathy	-	2	2	1	5
Bronchitis	2	1	3	-	6
Bronchiectasis	-	-	1	-	1
Total:	11	19	41	2	73

15% cure; 26% improvement; 56% no change.

Day Nursery.

The Day Nursery at Charlotte Street undertakes the main work under this heading, and there is, in addition, a play centre at the Castlegate Child Welfare Centre, which is open daily from 2 to 5 p.m. The attendances and charges at the Charlotte Street Day Nursery are as follows:-

(a) Total Number of Attendances - 4,001

Fresh Admissions (1) under one year, 20
(2) over one year, 62

Average Daily attendance - 15.

(b) Charges made - 5d. per day for one child; 9d. per day for two children; 1/- per day for three children.

(c) Receipts for the year - £81. 15. 5.

Food and Milk.

During the year, milk was supplied to the following extent:-

MOTHERS:	(1) Nursing	107	... 114.
	(2) Expectant	7	
CHILDREN:	(1) Under one year ...	204	... 245
	(2) Over one year ...	41	

Ophthalmia neonatorum.

Ophthalmia neonatorum is referred to in the sections of this Report dealing with infectious diseases and venereal diseases. The following additional information is submitted:-

Year.	Number of Registered Births.	Number of Notified Cases of Ophthalmia Neonatorum.	Rate per 1,000 Registered Births.
1933	3,182	53	16.6
Average 1923-32.	3,350	62	18.5

Confinement Attended By:-	Case Notified By:-			
	Doctor	Midwife	Institution.	Health Visitor.
Doctor:-	13	-	-	4
Midwife:-	2	12	-	1
Mat.Hosp.:-	1	-	6	5
Mat.Dist.:-	-	-	4	3
Other Instits.	-	-	2	-

Number/

Number of cases in which infection was gonococcal - 6

Twelve cases were treated in residential institutions; 18 as out-patients in other institutions; and 23 cases were treated at home.

In 49 cases a complete cure was obtained.

In 3 cases condition of eyes improved, but children died during treatment, 2 of prematurity and 1 of suffocation.

In 1 case right eye became clear, but in left eye slight opacity remained low down on the cornea clear of pupil, so that the sight was not affected.

Maternity Hospital.

1. Pre-natal cases -

(a) Number of cases treated in Wards ... 332
(b) Number of deaths 0

2. Abortions -

Abortions not now admitted.

3. & 4. Number of Confinements -

(a) In Wards - 695
(b) In District - 214

Number of deaths -

(a) In Wards - 7. (b) In District - 1.

		In Wards.	In District.
5. Number of infants born	(1) Alive	636	211
	(2) Still	72	6
6. Number of deaths of infants within 10 days...		25	4

Woodend (Municipal) Hospital.

1. Pre-natal cases -

Number of cases treated 4

2. Abortions -

Number of cases 0

3. Normal Confinements -

(a) Total No. (i) with medical attendance 39
(ii) without medical attendance 0

(b) No. of deaths - 2.

4. Abnormal or complicated confinements -

(a) Total No. (i) instrumental deliveries 7
(ii) other deliveries ... 12

(b) No. of deaths - 1.

5. Number of infants born (i) alive - 50; (ii) still - 10.

6. Number of deaths of infants within 10 days - 3.

Maternity Homes (Private).

1. Pre-natal cases -

Number of cases treated 8

2. Abortions -

Number of cases 1

3. Normal/

Normal Confinements -

(a) Total No.	(i)	with medical attendance	127
	(ii)	without medical attendance	7

(b) Number of deaths - 0.

4. Abnormal or complicated confinements -

(a) Total No.	(i)	instrumental deliveries	75
	(ii)	other deliveries ...	19

(b) Number of deaths - 2.

5. Number of infants born - (i) alive: 218; (ii) still: 15.

6. Number of deaths of infants within 10 days - 7.

Homes for Unmarried Mothers before and after confinement.

Unmarried mothers in their second or subsequent pregnancies are admitted to Loch Street Home. Unmarried mothers in their first pregnancy are admitted to Thorngrove Home. A total of 4 unmarried mothers was admitted to Loch Street Home and 11 unmarried mothers to Thorngrove Home.

Hospitals for Sick Children.

The Marasmus Ward at the City Hospital provides 22 cots for infants suffering chiefly from nutritional disorders. In all, a total of 125 infants was admitted to this ward during the year.

A Ward at Woodend Hospital provides 14 cots for infants suffering chiefly from rickets and orthopaedic disabilities. In all, a total of 19 cases was admitted during the year.

Convalescent Homes.

Number of cases treated -	Thorngrove Home.	Loch Street Home.
Mothers	37	6
Children under 1 year ...	134	5
Children over 1 year ...	10	19
	181	30

Home-Helps.

14 Home-Helps were employed in the homes; average period of assistance, 37 days; cost	£36. 7. 6.
10 Home-Helps were employed for washing; average number of washings per patient, 6; cost.. ...	10. 10. 0.
Total cost:	£ 46. 17. 6.

Treatment of Puerperal Fever and Pyrexia.

The following Table gives various particulars relating to the number of cases notified:-

	Puerperal Fever.	Puerperal Pyrexia.
(1) Number of Cases notified ...	75	21
(2) Number removed to City Hospital	70	9
(3) Total number of Deaths ...	7	4
(4) Number of cases following instrumental delivery ...	8	4
(5) Number of Deaths occurring under heading (4) ...	2	1

From the information given under headings (1) and (2), it will be seen that, of the 75 cases of Puerperal Fever notified, 70 were removed to the Puerperal Wards of the City Hospital, and that, of the 21 cases of Puerperal Pyrexia notified, 9 were admitted to the City Hospital. No deaths from Puerperal Fever occurred at home, but a death from post partum haemorrhage - which was notified as Puerperal Pyrexia - occurred at the patient's home.

Venereal/

VENEREAL DISEASES SERVICES.

TABLE XVII. - TREATMENT CENTRE AT ABERDEEN ROYAL INFIRMARY - CITY CASES.

Total Number of New Cases.

Year	Total	Syphilis		Gonorrhoea		Soft Chancre		Non-specific Ven. Infs.		Non V.D.	
		M	F	M	F	M	F	M	F	M	F
1933	487	64	47	207	26	5	0	56	19	45	18
1932	486	76	35	205	25	8	0	45	21	47	24
1931	469	71	37	221	29	6	0	5	3	57	40
1930	428	54	38	221	19	7	1	6	1	59	22
1929	498	76	48	254	24	6	0	3	0	52	35
1928	483	66	49	221	41	2	0	6	1	65	32
Average 1928-32. (5 yrs.)	473	69	41	224	28	6	0.2	13	5	56	31

In-Patient Cases.

1933	45	12	9	12	7	2	0	3	0	0	0
1932	33	10	7	6	9	1	0	0	0	0	0
1931	42	11	7	10	10	0	0	0	3	1	0
1930	22	3	5	9	4	0	0	1	0	0	0
1929	46	10	6	15	6	1	0	1	4	1	2
1928	46	11	9	8	13	0	0	1	4	0	0
Average 1928-32. (5 yrs.)	38	9	7	10	8	0.4	0	1	2	0.4	0.4

Attendances of All Cases.

1933	28110	5444	4074	13638	3383	30	0	397	922	110	112
1932	26341	4392	3582	13930	3730	55	0	224	209	121	98
1931	23628	3743	3228	13198	2288	47	0	464	412	149	99
1930	27979	3687	3706	16722	2494	8	0	713	490	99	60
1929	27308	4076	3383	14328	4070	7	0	809	512	71	52
1928	25854	3401	3467	12895	4443	6	0	976	560	48	58
Average 1928-32. (5 yrs.)	26222	3860	3473	14215	3405	25	0	637	437	98	72

LABORATORY EXAMINATIONS.

(a) Total Number.

Year.	Total.	Syphilis.				Gonorrhoea.	
		Wassermann & Kahn.		Spirochete.		Gonococcus.	
		Positive.	Negative	Positive	Negative	Positive	Negative
1933	7472	979	4509	10	15	470	1489
1932	7134	957	4319	7	40	433	1378
1931	6632	953	3949	13	39	341	1337
1930	7568	1206	4429	13	45	342	1533
1929	7373	1214	4059	21	45	375	1659
1928	7103	1262	3698	21	65	364	1693
Average 1928-32.	7162	1118	4091	15	47	371	1520

(b) Included in the foregoing Table (a) are the following number of specimens sent in by private practitioners.

1933	107	8	65	1	0	20	13
1932	110	6	81	0	0	14	9
1931	167	18	105	0	2	11	31
1930	325	60	170	1	6	27	61
1929	330	50	142	1	1	25	111
1928	357	44	166	2	7	39	99
Average 1928-32	258	36	133	1	3	23	62

(c) Included in Table (a) are also the undernoted numbers of bodies of infants, mostly still-born, examined for Syphilis.

Year.	Number of Bodies Examined.	Number found to contain the Spirochete of Syphilis.
1933	17	1
1932	34	2
1931	23	1
1930	23	0
1929	23	1
1928	25	1
Average 1928-32 ...	20	1

TABLE XVIII. - TREATMENT CENTRE AT ABERDEEN CITY FEVER HOSPITAL.

Total Number of New Cases.(City).

Year.	Total.	Syphilis		Gonorrhoea		Soft Ch.		Non-specific Ven. Infs.		Non V.D.	
		M	F	M	F	M	F	M	F	M	F
1933	244	19	9	93	22	4	1	32	18	29	17
1932	268	24	20	116	25	4	0	21	9	32	17
1931	332	32	22	163	40	4	0	1	3	30	37
1930	343	51	36	150	51	2	0	0	2	25	26
1929	320	46	26	137	60	0	0	3	2	21	25
1928	230	36	32	74	38	6	0	0	0	23	21
Average 1928-32	298	38	27	128	43	3	0	5	3	26	25

In-Patient Cases.

1933	25	8	5	11	1	-	-	-	-	-	-
1932	23	8	5	7	3	-	-	-	-	-	-
1931	29	6	4	10	5	0	0	1	2	0	1
1930	29	7	4	4	10	0	0	0	2	0	2
1929	43	3	10	12	14	0	1	1	2	0	0
1928	21	1	2	10	5	0	0	0	0	3	0
Average 1928-32	30	5	5	9	7	0	0.2	0.4	1	1	1

Attendances of All Cases.[x]

1933	13203	1852	1216	7527	1486	5	0	559	390	62	106
1932	16015	2127	1383	8652	2966	25	0	337	344	60	121
1931	14889	1869	1382	8504	2486	51	0	162	277	40	118
1930	17707	1837	1379	9220	4258	12	0	157	248	144	452
1929	13566	1045	951	7255	3443	4	0	273	221	59	315
1928	8406	521	568	4584	2282	12	0	55	131	90	163
Average 1928-32	14117	1480	1133	7643	3087	21	0	197	244	79	234

[x] Including Cases from Outwith the City.

Laboratory Examinations.

Year.	Total.	Syphilis				Gonorrhoea.	
		Wassermann & Kahn		Spirochete.		Gonococcus	
		Positive	Negative	Positive	Negative	Positive	Negative
1933	7195	827	4102	1	15	360	1890
1932	8999	1134	4979	1	18	422	2445
1931	7652	1118	4235	2	20	285	1992
1930	7761	1002	3735	1	14	300	2709
1929	6208	884	2992	8	25	313	1986
1928	4498	625	2108	2	10	221	1532
Average 1928-32	7024	953	3610	3	17	308	2133

VENEREAL DISEASES SERVICES.

Venereal Diseases Statistics.

The statistical data (Tables XVII., XVIII.) of the incidence and treatment of venereal diseases at the Royal Infirmary and City Hospital are submitted for the year under review.

Attendances for Treatment.

During the year, a total of 731 new City cases attended for treatment at the Treatment Centres which are situated at the Aberdeen Royal Infirmary and at the Aberdeen City Hospital. Of these, 487 attended the Infirmary Centre and 244 attended the City Hospital Centre. The average annual number of new City cases attending in the 1928-32 quinquennium was 771. The total number of attendances of City cases at the Infirmary Centre was 28,110, and the number of attendances at the City Hospital (mainly City cases) was 13,203, making a total of 41,313 attendances for the year. With regard to in-patients, in all 70 City cases were admitted in 1933, 45 being admitted to the Royal Infirmary and 25 to the City Hospital.

Ophthalmia Neonatorum.

A total of 53 cases was reported during 1933. The average annual number during the preceding ten years was 61.

BLIND PERSONS SERVICES.

Maintenance during Training.

During the year, 3 persons applied for and received from the Town Council, assistance towards their maintenance during the period of technical training. At the end of December, 1933, 20 persons in all were receiving such assistance.

Medical Certification of Blindness.

During the year 1933, 123 persons belonging to the City were examined at the Blind Persons Clinic, and 23 were re-examined.

The following statistics relative to the year 1933-34 are herewith submitted:-

TABLE XIX. - (A) CASES REGISTERED FOR FIRST TIME DURING YEAR ENDED 31st MARCH, 1934: AGES AT TIME OF REGISTRATION AND PROBABLE YEAR OF ONSET OF BLINDNESS.

Probable Year of Onset.	AGE AT REGISTRATION.												Total		
	0-4		5-15		16-39		40-49		50-69		70 +				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
Prior to 1930	-	-	-	-	-	-	-	-	2	1	-	3	2	4	6
1930	-	-	-	-	-	-	-	-	-	-	1	1	1	1	2
1931	-	-	-	-	-	2	-	-	-	-	-	1	-	3	3
1932	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1933	-	-	-	-	-	-	2	-	2	-	-	-	4	-	4
1934	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(B) CASES REGISTERED FOR FIRST TIME DURING YEAR ENDED 31st MARCH, 1934: CERTIFICATION OF BLINDNESS.

Certified by			Cases Registered without Med. examination.	TOTAL.
Ophthalmic Surgeons attached to Clinics.	Other Ophthalmic Surgeons.	Med. Practitioners other than Ophthal. Surgeons.		
15	-	-	-	15

TABLE XIX. - (C) NUMBERS ACCORDING TO DIFFERENT AGE GROUPS OF ALL BLIND PERSONS ON THE REGISTER.

0-4		5-15		16-39		40-49		50-69		70 +		TOTAL		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
-	-	6	-	35	36	24	11	57	62	23	38	145	147	292

(D) CLASSIFICATION OF BLIND SCHOOL CHILDREN.

(5 to 15 Years Inclusive)

	Normal		Mentally Sub-normal		Physically Defective		Both Mentally Sub-normal & Physically Defective.		TOTAL.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
At School - Blind Institution	4	..	-	-	-	-	-	-	4	-	4
Education Authority School ...	1	-	-	-	-	-	-	-	1	-	1
Not at School	-	-	1	-	-	-	-	-	1	-	1
Total ...	5	-	1	-	-	-	-	-	6	-	6
Number in each total who are deaf..	-	-	-	-	-	-	-	-	-	-	-

(E) EMPLOYMENT, ETC., CONDITION OF BLIND PERSONS OF 16 YEARS AND OVER.

EMPLOYED.								Unemployed and Untrained but with some capacity.				Unemployable.		Total.		
In Institutions for the Blind.						Outwith Institutions for the Blind.		Probably Trainable (under 50 years of age).		Untrainable but Employable in occupation of some sort.						
Undergoing Industrial Training.		Undergoing Secondary or Professional Education.		In Workshops												
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
11	7	-	3	35	13	11[x]	2	-	2[x]	-	-	82	120	139	147	286

[x] Including 2 under Home Workers' Scheme.

[x] Admitted later to Blind Asylum.

MENTAL HEALTH SERVICES

Kingseat Mental Hospital.

Under the provisions of the Local Government (Scotland) Act, 1929, the administration of the Kingseat Mental Hospital was transferred to the Public Health Committee of the Town Council.

On 31st December, 1933, there were on the Register, 363 males and 321 females - a total of 684 Certified Patients, being an increase of 8 males and 7 females as compared with the corresponding figures for the previous year (355 males and 314 females). Of the 684 Certified Patients/

Patients, 27 were Service (Private) Patients. The number of Voluntary Patients on the Register at the end of 1933 was 20, being 6 less than in the previous year.

Table XX. shows the admissions, re-admissions, discharges and deaths of Certified Patients during the year ended 31st December, 1933. In Table XXI. information is given as to the admissions, re-admissions, discharges and deaths of Certified Patients from the date of the opening of the Hospital, 16th May, 1904, until the end of 1933.

Admissions. A total of 118 patients was admitted under certificate - 51 males and 67 females. The following Statement shows the type of Mental Disorder in the Admissions of Certified Patients during the year:-

Form of Mental Disorder.	Admissions.		
	M.	F.	Total.
Idiocy or Imbecility -			
(a) With Epilepsy	-	1	1
(b) Without Epilepsy	-	-	-
(c) Moral	-	-	-
Insanity occurring in later life.			
1. Epileptic Insanity	4	1	5
2. General Paralysis	6	1	7
3. Infect.Exhaustion Psychosis	6	10	16
4. Mania -			
(a) Simple	5	4	9
(b) Acute	4	8	12
(c) Chronic	-	-	-
5. Melancholia -			
(a) Simple	3	3	6
(b) Acute	3	16	19
(c) Chronic	-	-	-
6. Alternating Insanity	-	2	2
7. Paranoia	-	4	4
8. Dementia -			
(a) Praecox	12	8	20
(b) Senile	5	8	13
(c) Organic	2	1	3
(d) Alcoholic	-	-	-
9. Paraphrenia	1	-	1
	51	67	118

Of the 118 admissions, 32 of the patients had at some previous time been inmates either of this or of another mental hospital. In 21 cases, heredity was the predisposing cause of the illness, while in 14 others the psychosis was associated with congenital weakness of mind. Seven patients owed their illness to syphilis of the nervous system, and in 8 cases alcohol was the causal factor. In a great many of the remainder of the admissions the mental breakdown was the result of some form of physical disorder.

Discharges. A total of 46 patients was discharged. Of these, 34 recovered - 16 males and 18 females - giving a recovery-rate - calculated on the number of admissions for the year - of 2.8 per cent. Twelve patients were discharged unrecovered, 7 of whom were relieved and 5 not improved.

Deaths. A total of 57 Certified Patients died, giving a percentage of

8.47

TABLE XX. - KINGSEAT MENTAL HOSPITAL.

Admissions, Re-Admissions, Discharges and Deaths of Certified Patients during the year ending 31st December, 1933.

	M.	F.	T.	M.	F.	T.
In the Hospital, 31st December, 1932.	355	314	669			
Absent on Probation	...	...	...			
Absent on Pass	...	..	...			
Total on Register				355	314	669
Cases Admitted -						
First admissions	36	50	86			
Not first admissions	15	17	32			
Total cases admitted during the year				51	67	118
Total cases under care during year				406	381	787
Cases Discharged -						
Recovered	16	18	34			
Relieved	3	4	7			
Not Improved	2	3	5			
Died	22	35	57			
Total Cases discharged and died during the year				43	60	103
Remaining in the Hospital, 31st December, 1933... ...	363	321	684			
Absent on Probation	...	...	...			
Absent on Pass	...	...	...			
Total on Register				363	321	684
Average daily number on Register during the year				358	318	676
*Persons under care during year.				...	...	...
Persons admitted				51	67	118
Persons recovered				16	18	34
Transferred to other asylums..				1	4	5
Transferred from other asylums.				4	6	10

*Persons, i.e., separate persons, in contradistinction to cases, which may include the same individual more than once.

TABLE XXI. - KINGSEAT MENTAL HOSPITAL.

Admissions, Re-Admissions, Discharges and Deaths of Certified Patients from the opening of the Hospital, 16th May, 1904, to 31st December, 1933.

	M.	F.	T.	M.	F.	T.
Persons admitted during period from 16th May, 1904, to 31st Dec.,1933.	1638	1514	3152			
Re-Admissions	268	325	593			
Total Cases admitted				1906	1839	3745
Discharged Cases -						
Recovered	576	608	1184			
Relieved	221	190	411			
Not Improved	39	29	68			
Died	707	691	1398			
Total cases discharged and died since the opening of the Hospital.				1543	1518	3061
Remaining on 31st December, 1933.				363	321	684
Average number on register during the period				283	269	552
Cases transferred from other asylums				4	6	10
Cases transferred to other asylums				1	4	5

8.4 on the average number resident during the year. This is slightly lower than the average yearly death-rate, which during the last 29 years was 8.6. The causes of the 57 deaths were as follows:-

Diseases of the Heart and Blood Vessels	26
Pulmonary Tuberculosis	8
Pneumonia	5
Epilepsy	4
General Paralysis of the Insane... ...	3
Exhaustion from Acute Psychosis... ...	3
Encephalitis Lethargica, Cerebral Softening, Huntingdon's Chorea, Generalised Tuberculosis, Nephritis, Acute Yellow Atrophy of the Liver, Sarcoma of the Jaw, Suicide: 1 each...	8
	57

Voluntary Patients. During the year, 5 voluntary patients were admitted; 7 were discharged, of whom 3 recovered, 1 improved and 3 were not improved. Four voluntary patients died.

Service Patients. During the year, 1 service patient was discharged and 1 was admitted, so that the number of service patients at the end of the year was similar to that at the commencement, namely 27. The cost of the maintenance and treatment of these patients is met by the Ministry of Pensions. The hospital was visited by Dr. L. Forward, a Medical Officer of the Ministry, on 26th September, 1933. He reported favourably on the care and treatment of these patients and on the hospital generally.

The Dentist, who was appointed to the Institution towards the end of the previous year, performed a great deal of useful work, and treated, in all, 198 patients.

The usual lectures and demonstrations were given by the matrons and medical staff.

At the Preliminary Examination of the Royal Medico-Psychological Association for proficiency in mental nursing, 10 nurses and 4 attendants passed; 7 nurses passed the Final Examination of this Association.

The statutory visits to Kingseat Mental Hospital by H.M. Commissioners of the General Board of Control were made by Dr. Hamilton Marr on 9th and 10th March and by Dr. J.P. Sturrock on 17th August.

PORT SANITARY SERVICES

Trade and Shipping.

The total foreign and coastwise shipping entering the Port during 1933 was 23,595 vessels, of which 1,615 were foreign. The total tonnage of all vessels was 2,412,530, of which 368,426 was foreign.

Medical Inspection of Shipping.

The amount of shipping entering the Port during the year, distinguished as foreign and coastwise, together with the number of ships inspected and the nature of the defects and the number of notices issued in connection therewith, are set forth in the following table:-

	Number of Vessels	Tonnage of Vessels	Number Inspected		Number Reported to be Defective	Number of Notices Issued.
			By the Medical Officer of Health	By the Sanitary Inspector		
Foreign Trading	313	261,596	14	230	9	9
Fishing	1,302	106,830	-	1	-	-
Total Foreign	1,615	368,426	14	231	9	9
Coastwise Trading	2,172	659,599	-	39	3	3
Fishing	19,808	1,384,505	-	-	-	-
Total Coastwise	21,980	2,044,104	-	39	3	3
Total Foreign and Coastwise	23,595	2,412,530	14	270	12	12

It will be seen that of the 23,595 vessels entering the Port, 21,110 were fishing vessels. In general, it may be said that the danger of fishing vessels importing infectious disease is largely confined to vessels from English or German ports introducing smallpox or other infectious diseases from these countries.

Eight seamen, 4 suffering from influenza, 2 from pneumonia, 1 from dysentery and 1 from tonsillitis, were admitted to hospital for treatment in 1933, and the necessary disinfection was carried out in each case.

Rat Destruction: Precautions against Plague.

Trapping of rats within the area of the Harbour Commissioners is regularly carried out, and these rats are submitted to laboratory examination for plague. In all, 67 rats were thus examined in Aberdeen during 1933, but no laboratory evidence of plague infection in rats was obtained.

The following measure of work on rat destruction carried out by the two whole-time rat-catchers of the Health Department is submitted:-

Number of pieces of poison bait laid ...	145,631
Number of pieces of poison bait eaten ...	33,529
Dry poison bait (mice) laid	468 pieces
Dry poison bait (") eaten	30 "

In addition, liquid poison in the form of red squill was sold by the Health Department to occupiers of business premises and dwelling-houses within the City. The quantity sold amounted to about 20 gallons, sufficient for the making up of 38,700 baits.

No ships arrived in Aberdeen from plague-infected ports.

Under the Public Health (Deratisation of Ships) Regulations (Scotland), 1929, 125 ships were inspected during the year, and 6 Deratisation Exemption Certificates were issued.

VETERINARY SERVICES.

The activities of the Health Department that are subject for discussion under "Veterinary Services" relate mainly to the control of food supplies.

Milk Control.

Milk and Dairies (Scotland) Act, 1914.

No administrative difficulties in the operation of this Act were encountered during the year. The number of registered producing dairies within the City remained the same except that one dairyman had removed to other premises which were altered suitably to conform with the requirements set out in the Dairy Bye-laws.

Inspection of Cows and Dairy Byres.

The number of dairy herds in the City was 8 in 1933, being the same number as in the previous year. The average number of cows was 76. The premises were visited quarterly and the cows examined. The animals were in a very good condition, well cared for, and the hygienic conditions were satisfactory. The premises were also suitable and maintained in a satisfactory condition.

Six cases of sub-acute mastitis were dealt with, the milk from the affected cows being discarded, but as the premises are somewhat limited, it was impossible to isolate the affected animals.

Inspection of Milk Cattle in Markets.

The Auction Marts were inspected regularly each week and all the cows exposed for sale were examined. No case of tuberculosis within the meaning of the Tuberculosis Order of 1925 was found and, as a whole, the type of cow sold in the markets in Aberdeen is very satisfactory, most of them being Irish in origin.

Bovine Tuberculosis.

No case of tuberculosis was found on clinical examination of the dairy herds nor in cows in milk exposed in the markets.

No action was necessary under Sections 13 and 14 of the Milk and Dairies (Scotland) Act, 1914.

No animal was tested with tuberculin.

Certified Milk: No licences have been issued for the production of Certified or Grade A(T.T.) milk. During the year 15 firms of milk retailers had their licences to retail Certified Milk renewed, while one additional retailer was licensed.

Pasteurised Milk: The Northern Co-operative Society, Limited, are licensed to pasteurise milk in their premises at Berryden Road, and to sell pasteurised milk in 33 branch shops belonging to the society. A licence was also granted to the Aberdeen and District Milk Agency, Limited, to pasteurise milk in their premises at Lilybank, Kittybrewster. Eleven applications for renewal were also received from other retailers, while two retailers were licensed. The applications were granted for the year.

Inspection of Meat.

Fat Stock Markets.

Regular examination of cattle exposed at the various markets was carried out as formerly, particular attention being paid to fat cows. A number of these so-called fat cows were detained for local slaughter on account of injury and disease. The disease for which the/

the animals were detained for local slaughter was chiefly tuberculosis and the number of these has diminished since it was pointed out to the vendors that it was their duty to report such animals under the Tuberculosis Order. No animals, other than cows, were detained for local slaughter.

Slaughterhouses.

There are four private slaughterhouses in operation within the Burgh, and two of these belong to the Flesher Incorporation. As has been pointed out in previous Reports, it is extremely difficult to secure adequate inspection of meat in four widely separated slaughterhouses.

The number and class of animals killed in the slaughterhouses during the year were as follows:-

Cattle.					Sheep.		Pigs.
Oxen	Heifers	Cows	Bulls	Calves	Sheep	Lambs	
30,768	20,680	1,636	136	13	136,535	5,888	4,073

The following table gives the number of carcases inspected and the weight of meat seized as unfit for human food in these slaughterhouses during the year:-

	Oxen	Bulls	Cows	Heifers	Calves	Sheep	Pigs
Number of carcases inspected	x	136	1,636	x	13	x	4,073
Number of carcases seized wholly -							
(1) For Tuberculosis ...	29	1	56	48	-	-	11
(2) For other diseases ...	4	1	15	3	2	27	6
Number of carcases of which portions were seized -							
(1) For Tuberculosis ...	165	-	42	214	-	-	75
(2) For other diseases ...	26	-	51	15	-	15	28
Total weight of meat seized ...	77,613 lbs.	1,736 lbs.	52,945 lbs.	90,035 lbs.	202 lbs.	1,531 lbs.	4,512 lbs.

x Accurate figures as to the number of oxen, heifer and sheep carcases inspected are not available. Every ox, heifer or sheep carcase showing evidence of disease is, of course, thoroughly examined, and all carcases of bulls, cows, calves and pigs are inspected.

Particulars are given below regarding the carcases seized wholly for diseases other than tuberculosis:-

Disease.	Oxen	Bulls	Cows	Heifers	Calves	Sheep	Pigs
Neoplasms ...	-	-	1	-	-	-	1
Pyaemia ...	-	-	1	1	1	1	1
Septicaemia ...	-	1	-	-	-	1	-
Septic Mammitis	-	-	2	-	-	1	-
Septic Metritis	-	-	6	-	-	-	-
Septic Peritonitis	1	-	-	1	-	3	3
Dropsy ...	-	-	1	1	-	4	-
Jaundice ...	-	-	1	-	-	-	-
Decomposition..	1	-	-	-	-	14	1
Extensive bruising	-	-	1	-	1	3	-
Fevered or badly bled	1	-	1	-	-	-	-
Blackleg ...	1	-	-	-	-	-	-
Congested ...	-	-	1	-	-	-	-
Total ...	4	1	15	3	2	27	6

Meat Marts.

There are two large wholesale meat marts in Aberdeen to which carcases are consigned from County Districts. As a routine, all such carcases are inspected by the Meat Inspector in Aberdeen, and the following table gives the number of carcases and the weight of meat seized as unfit for human food in these marts:-

	Oxen	Bulls	Cows	Heifers	Calves	Sheep	Pigs
Number of carcases seized wholly -							
(1) For tuberculosis ...	3	-	1	2	-	-	3
(2) For other diseases...	6	1	8	3	3	61	7
Number of carcases of which portions were seized -							
(1) For tuberculosis ...	6	-	5	5	-	-	4
(2) For other diseases...	24	-	26	14	1	27	17
Total weight of meat seized	6,901 lbs.	534 lbs.	8,203 lbs.	2,563 lbs.	213 lbs.	3,707 lbs.	1,992 lbs.

Every seizure made was by consent of the owner of the unfit food and on no occasion were legal proceedings with regard to unfit food necessary.

Slaughter of Animals (Scotland) Act, 1928.

This Act, as applying to cattle, came into force on 1st January, 1930, and to sheep on 1st October, 1930. In 1933, one prosecution, relating to sheep, was instituted. Three persons were involved, and fines of £3, £2 and £1 were imposed.

During the year, 96 licences were issued for the use of the mechanically operated instrument.

Diseases of Animals Acts.

The routine work necessary under the various Acts and Orders was carried out and one case of Anthrax in the Hutcheon Street Slaughterhouse was dealt with.

Control of Other Foods.

In addition to the control of milk and milk food products, and of meat, the Health Department continues an extensive supervision of other foods. Thus, the Fish Market is visited daily, and the quantity of fish destroyed as unfit for human food in 1933 was 3,900 lbs., as compared with 35,540 lbs. in 1932. The sale of fruit and vegetables, both wholesale and retail, is also under intensive supervision. So also considerable attention continues to be paid to the inspection of tinned foods, and all factories where such articles are prepared are regularly visited. Provision curing yards, wholesale warehouses, and shops are also subjected to routine visitation.

LABORATORY SERVICES.

The following statement gives in detail the number and results of examinations for the City of Aberdeen (including City Hospital and Woodend Hospital) during the year 1933.

	Positive	Negative	Total	Grand Total.
Diphtheria:				
Throat and nose swabs	647	7,792	8,439	8,439
Tuberculosis:				
Sputum	1,168	2,379	3,547	
Pus	2	29	31	
Faeces	2	30	32	
Urines	6	115	121	
Cerebro-spinal fluids	0	6	6	
Pleural fluids	0	32	32	3,769
	Forward ...			12,208

Typhoid/

	Positive	Negative	Total	Grand Total
Brought Forward				12,208
Typhoid Fever:				
Blood cultures	3	55	58	
Widals	5	104	109	
Faeces	18	53	71	
Urines	16	39	55	293
Paratyphoid A,B,and C:				
Blood cultures	3	2	5	
Widals	9	313	322	
Faeces	31	56	87	
Urines	6	74	80	494
Bacillary Dysentery:				
Agglutinations	0	2	2	
Faeces	219	1,143	1,362	1,364
Food Poisoning:				
Blood agglutinations	4	2	6	
Blood cultures	2	5	7	
Faeces	16	11	27	
Urines	4	5	9	
Pus	2	0	2	
Throat swabs	1	1	2	53
Puerperal Fever:				
Blood cultures	31	128	159	
Pus	126	18	144	303
Undulant Fever:				
Blood agglutinations	4	91	95	
Faeces	0	1	1	
Urines	0	1	1	97
General:				
Blood counts			742	
Differential cell counts			721	
Blood cultures (various)			474	
Faeces for organisms			14	
Faeces for protozoa			21	
Malaria	2	20	22	
Histological specimens			66	
Ophthalmia Neonatorum	33	181	214	
Sputum for organisms			208	
Pus and fluids for organisms			364	
Throat, nose and ear swabs for organisms			860	
Eye swabs for organisms			215	
Cerebro-spinal fluids (other than tuberculosis)			275	
Urines for bacteriological examination			269	
Urines for pathological examination			3,437	
Vaccines			110	
Pleural fluids (not T.B.)			51	
Autopsies			12	
Blood grouping			10	
Animal/				
	Forward	...		14,812

	Positive	Negative	Total	Grand Total
Brought Forward				14,812
General (contd.):				
Animal specimens			1	
Faeces for lead			13	
Urines for lead			14	
Miscellaneous			24	8,137
Venereal Diseases:				
Wassermann reactions	433	2,089	2,522	
Kahn Tests	394	2,013	2,407	
Gonococcal examinations	360	1,890	2,250	
Spirochaetes	1	15	16	7,195
Biochemical Examinations:				
Blood sugar			203	
Blood urea			154	
Urine sugar			95	
Urine urea			24	
Gastric contents			6	
Faeces for blood			55	
Van den Bergh test			20	
Blood cholesterol			3	
Test meals			283	
Miscellaneous			33	876
Chemical Examinations:				
Oil samples			4	
Paint samples			5	9
Water, Food and Drug Samples:				
Bacteriological examination of waters			289	
Swimming Bath waters			26	
Bacteriological examination of milks			76	
All samples analysed under the Sale of Food and Drugs Acts and Public Health Regulations			1,137	1,528
Animal Experiments:				
Guinea pigs inoculated with milk deposits for tubercle bacilli			4	
Guinea pigs inoculated with human material for tubercle bacilli			29	
Guinea pigs inoculated with milk deposits for Brucella Abortus			76	
Guinea pigs inoculated with human material for Brucella Abortus			2	
Guinea pigs inoculated with urine for Leptospira icterohaemorrhagiae			1	
Guinea pigs inoculated for diphtheria virulence test			5	
Mice used in typing pneumococci			301	418
				32,975

In addition to the above examinations for the City of Aberdeen, 8,004 examinations were carried out for the North-Eastern Counties within the Laboratory Services Scheme.

CHAPTER V.

STATISTICAL COMMENTARY.

POPULATION.

The population of the City (including the inmates of Parish Hospital and Kingseat Mental Hospital chargeable to Aberdeen) at the middle of the year was 172,036. This estimate is based on the census population for 1931; and the subsequent increase or decrease is calculated by adding the excess of births over deaths and adding or subtracting the loss or gain of population due to emigration and immigration.

The accompanying table gives the percentage and number of population at each of the principal age-periods.

TABLE XXII. - ABERDEEN - POPULATION AT VARIOUS AGE-PERIODS - 1933.
(As estimated from Proportions at Census of 1931).

	Under 1 yr.	1 and under 5 yrs.	5 and under 15 yrs.	15 and under 25 yrs.	25 and under 45 yrs.	45 and under 65 yrs.	65 yrs. and upwards	All Ages.
Percentage of Population at each age(according to census. 1921	2.35	6.66	19.41	20.00	27.00	18.42	6.16	...
1931	1.75	6.81	17.22	18.65	28.51	19.81	7.25	...
Estimated Population at each age-period in 1933	3,010	11,716	29,625	32,085	49,047	34,080	12,473	172,036

BIRTHS.

(TABLE XXIII.)

The total number of births during the year 1933, corrected for transfers, was 3,019 (2,830 legitimate and 189 illegitimate), equivalent to a rate of 17.6 per 1,000 of the population, as against a rate of 18.7 per 1,000 in 1932. The average rate for the 1928-1932 quinquennium was 19.2.

Proportion of Males to Females: The number of male infants to every 100 female infants, corrected for transfers, during 1933 was 106, as compared with 104 for 1932.

Illegitimate Births: In 1933, the number of illegitimate births after correction for transfers, was 189, and amounted to 6.3 per cent. of the total births. The average rate for the 1928-1932 quinquennium was 8.5

Still-Births: In 1933, the number of still-births was 166, and amounted to 52 per 1,000 registered births. In 1932 the rate was 57.

MARRIAGES.

(TABLE XXIII)

During the year 1933, there were 1,524 marriages within the City, equivalent to a rate of 8.9 per 1,000 of the population as against 8.6 in 1932. The average rate for the 1928-1932 quinquennium was 9.1.

Residence: In 1933, 1,094 of the males married were ordinarily resident in/

in Aberdeen, the remaining 430 coming from outwith the City. As regards the females, 1,182 were ordinarily resident in the City, and 342 lived outside the City.

Status: Of the 1,524 marriages in 1933, the persons married included 119 widowers and 67 widows.

DEATHS.

(TABLE XXIII).

The total number of deaths during 1933, corrected for transfers, was 2,240, equivalent to a death-rate of 13.0 per 1,000 of the population. For the quinquennium 1928-32, the average annual number of deaths was 2,276 with a rate of 13.5.

The Average Age at Death. Of all persons dying during 1933 the average age at death was 52.1 years. In the preceding quinquennium, it was 50.5 years.

Excess of Birth-Rate over Death-Rate: In Table XXIII. will be found a column giving the excess of the birth-rate over the death-rate since the commencement of registration. The excess in 1933 was 4.6. For the quinquennium 1928-32, the excess was 5.7. The usual excess of birth-rate over death-rate for many years prior to 1911 was about 11 to 14.

ANALYSIS OF THE DEATH-RATE.

Mortality in Relation to Age and Causes (Tables XV.,XXIV. and XXV).

Infant Mortality: This is dealt with in detail in the section of this Report relating to Maternity and Child Welfare Services.

Mortality at Pre-School Age-Period (1 to 5 years), excluding Infant Period: The number of deaths at this age-period was 94, equivalent to a death-rate of 8.0 per 1,000 of the population at this age, as compared with an average of 8.9 in the preceding five years.

Mortality at School Age-Period (5-15 years): The deaths at this age-period amounted to 46 or 1.6 per 1,000 of population at this age, as against 1.7 in the preceding quinquennium.

Mortality at Adolescent Age-Period (15 to 25 years): The deaths at this age-period were 74 or 2.3 per 1,000 of the population, being the same as the average rate for the preceding five years.

Mortality at Early-Mature Age-Period (25 to 45 years): The number of deaths at this age-period was 242 giving a rate of 4.9 per 1,000 of the population. The rate for the preceding quinquennium was 4.6.

Mortality at Late-Mature Age-Period (45 to 65 years): The deaths amounted to 524, with a rate of 15.4 per 1,000 of the population at this period, as compared with an average rate of 15.8 for the preceding quinquennium.

Mortality at Post-Mature Age-Period (65 years and upwards): The deaths amounted to 1,024, with an equivalent rate of 82.1 per 1,000 of the population, as compared with an average rate of 85.2 for the 1928-32 quinquennium.

Mortality at All Ages: The death-rate from all causes has already been referred to.

The percentage fall in the death-rate from the decade of 1861-70 up to the end of 1933 is for each age-period as follows - 67 for the pre-school/

pre-school (including the infant) eriod; 79 for the school period; 76 for the adolescent period; 62 for the early-mature period; 35 for the late-mature period; and 14 for the post-mature period.

During 1933, the diseases responsible for the largest number of deaths were as follows:- Diseases of the circulatory system, 460 deaths; diseases of the nervous system, 357 (including 302 due to cerebral haemorrhage); respiratory diseases, 298; malignant diseases, 267; zymotic diseases, 138; and digestive diseases, 137. There were 113 deaths from tuberculosis, of which 93 were respiratory.

VARIATIONS IN MORTALITY FROM SELECTED CAUSES SINCE 1856.

The variations in the mortality from selected causes at all ages since the year 1856 - the second year of civil registration - can be conveniently followed in Table I. (p. 10).

Infectious Diseases: These, including tuberculosis, are dealt with in greater detail in the part of the Report devoted specially to Infectious Diseases.

Cancer and other Malignant Diseases. The cancer death-rate was 155 per 100,000 of the population in 1933, as compared with a rate of 160 in 1932. During the 1928-32 quinquennium, the average rate was 153.

Pneumonia: The death-rate from pneumonia was 98 per 100,000 of the population, as against an average of 106 during the 1928-32 quinquennium.

Bronchitis gave a death-rate of 56 per 100,000 of the population, as compared with an average of 65 for the preceding quinquennium.

Diseases of the Digestive System: In 1933, the death-rate was 80 per 100,000, as against an average of 72 in the 1928-32 quinquennium.

Diseases of the Circulatory System: The death-rate from these diseases was 267 per 100,000, as compared with an average of 265 for the preceding quinquennium.

TABLE XXIII. - ABERDEEN - MARRIAGE, BIRTH and DEATH RATES - 1856-1933.
(Per 1,000 of Population.)

Year.	Population.	Marriages		Births*		Deaths*				Excess of Birth-rate over Death-rate.
		Number	Rate per 1000 of Population.	Number	Rate per 1000 of Population.	Illegit. Births per 100 Total Births.	Number	Rate per 1000 of Population.	Average Age at Death.	
1933	172,036	1,524	8.9	3,019	17.6	6.3	2,240	13.0	52.1	4.6
1932	170,562	1,467	8.6	3,188	18.7	8.0	2,293	13.4	51.2	5.3
1931	168,608	1,519	9.0	3,231	19.2	7.8	2,346	13.9	53.0	5.3
1930	167,718	1,557	9.3	3,303	19.7	8.7	2,083	12.4	50.0	7.3
1929	166,833	1,558	9.3	3,112	18.7	9.0	2,422	14.5	50.3	4.2
1928	165,952	1,531	9.2	3,314	19.9	8.8	2,237	13.5	48.2	6.4
Mean of 1928-32	167,935	1,526	9.1	3,230	19.2	8.5	2,276	13.5	50.5	5.7
1927	165,075	1,502	9.1	3,182	19.3	7.5	2,180	13.2	49.1	6.1
1926	164,204	1,403	8.5	3,406	20.7	7.0	2,115	12.9	48.0	7.8
1925	163,337	1,519	9.3	3,390	20.8	7.4	2,170	13.3	46.5	7.5
1924	162,475	1,459	9.0	3,437	21.2	7.2	2,302	14.2	44.7	7.0
1923	161,617	1,564	9.7	3,766	23.3	7.7	2,157	13.3	45.1	10.0
Mean of 1923-27	163,342	1,489	9.1	3,436	21.1	7.4	2,185	13.4	46.7	7.7
1916-20	161,568	1,754	10.9	3,479	21.5	10.6	2,439	15.1	41.7	6.5
1911-15	164,324	1,489	9.1	3,959	24.1	10.2	2,752	16.8	38.1	7.4
1906-10	163,620	1,360	8.3	4,505	27.5	9.7	2,512	15.4	37.6	12.2
1901- 5	158,082	1,428	9.0	4,872	30.8	8.5	2,763	17.5	34.9	13.3
1896-1900	145,740	1,356	9.3	4,636	31.8	8.3	2,644	18.1	33.3	13.7
1891-5	131,627	1,099	8.4	4,114	31.3	9.8	2,539	19.3	32.9	12.0
1886-90	117,587	911	7.8	3,827	32.5	10.4	2,370	20.2	...	12.3
1881-5	108,959	848	7.8	3,712	34.1	10.6	2,159	19.8	...	14.3
1876-80	100,419	788	7.9	3,480	34.7	10.9	2,100	20.9	...	13.8
1871-5	91,941	705	7.7	3,169	34.5	12.1	2,063	22.4	...	12.1
1866-70	84,234	684	8.1	3,010	35.7	12.9	1,978	23.5	...	12.2
1861-65	77,040	624	8.1	2,663	34.6	...	1,915	24.9	...	9.7
1856-60	73,458	524	7.1	2,397	32.6	...	1,772	24.1	...	8.5

* Corrected for transferred births for 1911 and subsequent years.

* Corrected for transferred deaths for 1904 and subsequent years.

TABLE XXIV. - ABERDEEN - MORTALITY FROM ALL CAUSES AT VARIOUS AGE-PERIODS[x]

(per 1,000 of population at each age).

Year.	Infantile Mortality.	Age Period						
	Deaths of Infants under 1 year per 1,000 Births.	0-5 years	5-15 years	15-25 years	25-45 years	45-65 years	65 years and upwards.	All Ages.
1933	79	22.5	1.6	2.3	4.9	15.4	82.1	13.0
1932	93	27.0	1.5	1.8	4.9	16.1	81.6	13.4
1931	90	25.0	1.5	2.7	4.4	15.6	92.0	13.9
1930	80	24.2	2.0	1.9	4.1	15.4	76.0	12.4
1929	95	28.4	1.8	2.9	4.6	16.7	94.0	14.5
1928	94	31.5	1.8	2.4	4.8	15.0	82.2	13.5
Mean of 1928-32	90	27.2	1.7	2.3	4.6	15.8	85.2	13.5
1927	105	30.2	1.9	1.7	4.1	15.7	83.7	13.2
1926	96	30.0	2.2	2.4	4.3	14.8	79.8	12.9
1925	109	35.4	1.7	2.3	5.5	13.6	80.3	13.3
1924	122	43.6	1.5	2.6	4.6	14.6	84.5	14.2
1923	104	38.0	1.3	2.8	4.7	15.2	78.8	13.3
Mean of 1923-27	107	35.4	1.7	2.4	4.6	14.8	81.4	13.4
1916-20	127	41.0	2.9	4.0	6.8	17.4	82.8	15.1
1911-15	143	49.7	4.0	4.1	6.7	20.0	86.5	16.8
1906-10	128	42.5	2.9	3.5	7.0	19.5	84.2	15.4
1901- 5	143	52.2	3.1	4.6	7.4	21.3	83.3	17.1
1896-1900	144	54.2	3.4	5.0	9.2	22.2	81.6	18.1
1891- 5	147	57.5	4.5	5.8	9.3	22.7	86.5	19.3
1886-90	140	52.9	4.8	7.0	10.5	22.9	88.1	20.2
1881- 5	126	50.9	5.4	6.4	10.1	23.8	86.3	19.8
1876-1880	129	53.1	6.2	7.7	11.3	22.1	86.6	20.9
1871- 5	133	57.5	7.7	8.2	12.0	22.6	91.5	22.4
1866-1870	133	68.0	7.2	8.9	12.4	22.2	91.2	23.5
1861- 5	130	68.9	8.1	10.5	13.4	24.7	98.7	24.9
1856-1860	126	67.8	9.3	9.8	12.6	21.8	97.5	24.1

[x] Corrected for transferred deaths in 1904 and subsequent years.

TABLE XXV. - ABERDEEN - MORTALITY AT VARIOUS AGE-PERIODS FROM VARIOUS CAUSES.
(Corrected for Transferred Deaths)

Age.	All Causes.	Zymotic Diseases.			Tuberculous Diseases		Respiratory Diseases.			Diseases of Circulatory Sys.	Diseases of Gen.-Urinary System.	Nervous Diseases			Dis. of Digestive Sys. inc. Diarrhoea.	Malignant Diseases.	Developmental Dis. (ex. old age).	Accident and Violence.	Debility, Atrophy, Inanition		Miscellaneous.
		Ordinary.	Venereal.	Septic.	Phthisis.	Other Tuberculous.	Pneumonia.	Bronchitis.	Other Respiratory.			Cerebral Haem., etc.	Convulsions.	Other Nervous.					Under Age of 1 year.	Above Age of 65 years.	
							A. Number of Deaths - Year 1933.														
Under 1 year.	238	14	0	4	0	2	45	14	0	0	0	0	15	3	18	0	80	6	25	-	12
1- 5 years.	94	24	0	3	4	4	33	2	0	2	1	0	0	0	8	1	2	8	-	-	2
5-15 "	46	12	0	2	2	2	2	0	0	2	2	0	0	2	8	1	0	7	-	-	4
15-25 "	74	2	2	1	14	5	5	1	1	9	2	3	0	3	9	0	0	13	-	-	4
25-45 "	242	9	1	0	40	5	20	3	5	23	10	11	0	12	20	28	0	33	-	-	22
45-65 "	524	22	3	7	25	1	37	21	8	103	20	79	0	10	37	102	0	25	-	-	24
65 + "	1024	30	1	1	8	1	27	56	18	321	50	209	0	10	37	135	0	22	-	55	43
All Ages.	2240	113	6	19	93	20	169	97	32	460	85	302	15	40	137	267	82	114	25	55	109
1933.							B. Death-Rate per 100,000														
All Ages.	1302	66	4	11	54	12	98	56	18	267	49	176	9	23	80	155	48	66	-	-	63
Average 1928-1932. All Ages.	1355	59	4	10	58	25	106	65	20	265	60	171	7	32	72	153	50	63	-	-	64